

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: CRIS RODRIGUEZ Examiner #: 73164 Date: 2/13/03  
 Art Unit: 3763 Phone Number 308-2194 Serial Number: 09/880,241  
 Mail Box and Bldg/Room Location: CD25 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: ... Treating Aneurysms  
 Inventors (please provide full names): Boris Leschinsky

Earliest Priority Filing Date: 4/12/96

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

method of treating an aneurysm in a blood vessel  
 - inserting a catheter at an aneurysm location  
 - injecting crosslinking solution through the  
 lumen and crosslinks the aneurysmal wall  
 any # of lumens  
 \* with or without balloons.

\* See attachment for other words

## STAFF USE ONLY

Searcher: J. Liewalko  
 Searcher Phone #: 305-8587  
 Searcher Location: CP2-2608  
 Date Searcher Picked Up: 2/19/03  
 Date Completed: 2/19/03  
 Searcher Prep & Review Time: 180m  
 Clerical Prep Time: 40m  
 Online Time: 40m

## Type of Search

NA Sequence (#) \_\_\_\_\_  
 AA Sequence (#) \_\_\_\_\_  
 Structure (#) \_\_\_\_\_  
 Bibliographic ☒  
 Litigation ☒  
 Fulltext ☒  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors and cost where applicable

STN \_\_\_\_\_  
 Dialog ☒  
 Questel/Orbit \_\_\_\_\_  
 Dr.Link \_\_\_\_\_  
 Lexis/Nexis \_\_\_\_\_  
 Sequence Systems \_\_\_\_\_  
 WWW/Internet ☒  
 Other (specify) \_\_\_\_\_

PTO-1590 (8-01)

AL  
 AL  
 GO

10:15

**Cris Rodriguez**  
**CP2-3D25**


2/17/03

Cris:

Attached are the results of your request regarding a method of treating aneurysms.

If you have any questions or would like this search reworked in any way, please don't hesitate to call me at 305-8587 or email me at [Julie.walko@uspto.gov](mailto:Julie.walko@uspto.gov).

Sincerely,

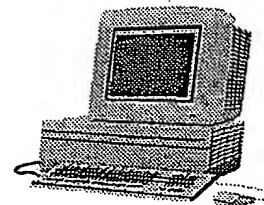
  
Julie Walko  
CP2 2C08

P.S. – I ran out of blue stickies, that's why there are some blue and some orange.

# EIC3700/2900

## Search Results

### Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please *contact the EIC searcher who performed your search (or either of us)*:

John Sims, Team Leader, 308-4836, CP2-2C08  
or Jeanne Horrigan, Searcher, 305-5934

### Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example:

➤ Relevant prior art found, search results used as follows:

☐ 102 rejection

☐ 103 rejection

☐ Cited as being of interest.

☐ Helped examiner better understand the invention.

☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

☐ Foreign Patent(s)

☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art not found:

☐ Results verified the lack of relevant prior art (helped determine patentability).

☐ Search results were not useful in determining patentability or understanding the invention.

Other Comments:

Drop off completed forms in the inbox, EIC 3700/2900, CP2-2C08, or in CPK1-5A02. Thanks!

Author  
Search

4/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014154372 \*\*Image available\*\*  
WPI Acc No: 2001-638591/200173  
XRAM Acc No: C01-188860  
XRPX Acc No: N01-477322

**Stent and graft device for treating aneurysmal wall of bodily vessel,  
contains crosslinking solution pumped out through lumen and port toward  
proximal end of catheter**

Patent Assignee: LESCHINSKY B (LESC-I)  
Inventor: **LESCHINSKY B**  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20010029349	A1	20011011	US 96631337	A	19960412	200173 B
			US 98165333	A	19981001	
			US 2001880241	A	20010613	

Priority Applications (No Type Date): US 2001880241 A 20010613; US 96631337  
A 19960412; US 98165333 A 19981001

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20010029349	A1	13	A61M-029/00	Cont of application US 96631337 CIP of application US 98165333

Abstract (Basic): US 20010029349 A1

NOVELTY - Stent and graft device has a catheter (31B) with a longitudinal axis and lumen(s). A distal end of the catheter is connected to a crosslinking solution. An infusion and vacuum port pumps out crosslinking solution through the lumen and port toward the proximal end of the catheter for crosslinking at least a portion of the vessel.

USE - Used for treating an **aneurysmal** wall of a bodily vessel (claimed).

ADVANTAGE - The device provides crosslinking solution that strengthens or toughens the **aneurysmal** wall by changing the nature of the wall, i.e. crosslinking the collagen in the wall.

DESCRIPTION OF DRAWING(S) - The figure is a longitudinal cross-sectional view of the catheter.

Catheter (31B)

Occlusion balloons (34, 35)

pp; 13 DwgNo 6/7

Title Terms: STENT; GRAFT; DEVICE; TREAT; WALL; BODY; VESSEL; CONTAIN;  
CROSSLINK; SOLUTION; PUMP; THROUGH; LUMEN; PORT; PROXIMITY; END; CATHETER  
Derwent Class: B05; B07; P34  
International Patent Class (Main): A61M-029/00  
File Segment: CPI; EngPI

4/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014131524 \*\*Image available\*\*  
WPI Acc No: 2001-615735/200171  
Related WPI Acc No: 2000-422352  
XRPX Acc No: N01-459308

the  
Patent

Reduced diameter flexible stent deployment catheter, slidably inserts  
insertion sheath in inner tube to state in which it is not restrained at  
any location in inner tube during use of insertion sheath

Patent Assignee: ENDOVASCULAR TECHNOLOGIES INC (ENDO-N)

Inventor: **LESCHINSKY B**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6306145	B1	20011023	US 986113	A	19980113	200171 B
			US 2000541215	A	20000403	

Priority Applications (No Type Date): US 986113 A 19980113; US 2000541215 A  
20000403

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6306145	B1	9	A61F-011/00	Cont of application US 986113 Cont of patent US 6074398

Abstract (Basic): US 6306145 B1

NOVELTY - The catheter has a catheter body (10), with a tube portion (43) and a greater cross-sectional profile sheath portion (42), an inner tube (40) slidably disposed in the catheter body and a plunger (20) slidably disposed in the catheter body with a profile configured to mate with the inner surface of the catheter body. The plunger comprises a delivery sheath portion (44) with a greater cross-sectional profile than that of a tube portion (45) of the plunger.

DETAILED DESCRIPTION - The inner tube is adapted to translate longitudinally independently of the plunger beyond the catheter body distal end.

USE - For deploying a stent/ graft in situ to repair defective body lumens, **aneurysms**, and particularly abdominal aortic **aneurysms**, which is a sac caused by an abnormal dilation of the wall of the aorta as it passes through the abdomen. For repairing defects in arteries and other lumens within the body.

ADVANTAGE - Minimizes the amount of blood restriction during the stent/ graft deployment procedure. Allows for easier navigation through often tortuous arteries and also for a smaller insertion hole in the femoral artery.

DESCRIPTION OF DRAWING(S) - The figure illustrates a longitudinal cross section of the inserted stent deployment catheter after the insertion sheath has been inserted into the patient, and a longitudinal cross section inserted into the reduced diameter catheter after the stent has been expanded and the tip has been pulled through the stent lumen.

Catheter body (10)  
Plunger (20)  
Inner tube (40)  
Sheath portion of catheter body (42)  
Tube portion of catheter body (43)  
Delivery sheath portion of plunger (44)  
Tube portion of plunger (45)  
pp; 9 DwgNo 4, 5/5

Title Terms: REDUCE; DIAMETER; FLEXIBLE; STENT; DEPLOY; CATHETER; SLIDE;  
INSERT; INSERT; SHEATH; INNER; TUBE; STATE; RESTRAIN; LOCATE; INNER; TUBE  
; INSERT; SHEATH

Derwent Class: P32

International Patent Class (Main): A61F-011/00

File Segment: EngPI

DIALOG(R)File 350:Derwent WPIX  
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013759410     \*\*Image available\*\*  
WPI Acc No: 2001-243622/200125  
XRPX Acc No: N01-173366

**Bifurcated graft for branched vascular passageway in curing aortic aneurysms , has tube with split in center, forming branches in contact with passageway branches**

Patent Assignee: DATASCOPE INVESTMENT CORP (DATA-N)

Inventor: GOUPIL D; **LESCHINSKY B**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6200339	B1	20010313	US 99256026	A	19990223	200125 B

Priority Applications (No Type Date): US 99256026 A 19990223

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6200339	B1	13	A61F-002/06	

Abstract (Basic): US 6200339 B1

NOVELTY - Graft (10) includes tube having split formed between the branches sharing common longitudinal axis. Ends (14) of the graft in contact with the passageway, branches of either side upon complete deployment.

DETAILED DESCRIPTION - Mid-portion (12) of the graft is larger in diameter than the ends. Length of the septum (16) is larger than the central diameter.

USE - For branched vascular passageway in curing aortic **aneurysms**

ADVANTAGE - Facilitates implantation by simpler operation, as the graft including tube with split in the center which is made to contact with the ends to passageway branches.

DESCRIPTION OF DRAWING(S) - The figure shows the longitudinal view of split tube and the graft folded along the split.

Graft (10)  
Mid-portion (12)  
Graft ends (14)  
Septum (16)  
pp; 13 DwgNo 2/6

Title Terms: BIFURCATE; GRAFT; BRANCH; VASCULAR; PASSAGE; CURE; AORTA; **ANEURYSM** ; TUBE; SPLIT; FORMING; BRANCH; CONTACT; PASSAGE; BRANCH

Derwent Class: P32

International Patent Class (Main): A61F-002/06

File Segment: EngPI

4/5/4     (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
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012784925     \*\*Image available\*\*  
WPI Acc No: 1999-591151/199950  
XRAM Acc No: C99-172613  
XRPX Acc No: N99-436063

**Reduced friction graft and stent or graft deployment catheter for repairing defects in arteries and other lumens**

Patent Assignee: DATASCOPE INVESTMENT CORP (DATA-N)

Inventor: AHARI F; **LESCHINSKY B**

Number of Countries: 082 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9949790	A1	19991007	WO 99US7125	A	19990330	199950 B
AU 9934598	A	19991018	AU 9934598	A	19990330	200010

Priority Applications (No Type Date): US 9850148 A 19980330

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9949790	A1	E	24	A61B-017/00	
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Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9934598	A			A61B-017/00	Based on patent WO 9949790
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Abstract (Basic): WO 9949790 A1

NOVELTY - The catheter (10) has a tip (50), an inner tube (40), a stent or graft (30) and a plunger (20). A coating (80) of a biocompatible lubricious material (e.g. an amino-functional silicone oligomer) is applied between the catheter inner surface (70) and the outer surface (60) of the stent or graft. The stent or graft is radially compressed to its maximum extent without increasing the friction between the catheter and the stent or graft.

USE - For repairing defects in arteries and other lumens of the body, and particularly for delivering a reduced friction graft in situ for abdominal aortic **aneurysms** repair.

ADVANTAGE - The catheter incorporates lubricious coating which prevents damage to the stent or graft such as buckling or kinking during deployment.

DESCRIPTION OF DRAWING(S) - The drawing shows a longitudinal cross-section of the distal portion of the catheter

Catheter (10)

Plunger (20)

Stent/catheter (30)

Stent/ graft outer surface (60)

Catheter inner surface (70)

Lubricious coating (80,90)

pp; 24 DwgNo 2/2

Title Terms: REDUCE; FRICTION; GRAFT; STENT; GRAFT; DEPLOY; CATHETER; REPAIR; DEFECT; ARTERY; LUMEN

Derwent Class: A26; A96; D22; P31

International Patent Class (Main): A61B-017/00

File Segment: CPI; EngPI

4/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012520213 \*\*Image available\*\*

WPI Acc No: 1999-326319/199927

XRPX Acc No: N99-244802

**Invertible bifurcated, bilateral intra-aortic bypass stent or graft for intraluminal delivery, and deployment method**

Patent Assignee: DATASCOPE INVESTMENT CORP (DATA-N)

Inventor: **LESCHINSKY B**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5904713	A	19990518	US 97892410	A	19970714	199927 B

Priority Applications (No Type Date): US 97892410 A 19970714

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5904713	A	5	A61F-002/06	

Abstract (Basic): US 5904713 A

NOVELTY - A top end of a D-shape cross section graft leg and the bottom end of a parallel D-shape cross section leg are partially connected along a septum. A fixation mechanism and stent fixes the top and bottom ends of the respective leg within a vessel.

DETAILED DESCRIPTION - Upon deployment, the second leg is inverted, and the two legs are parallel and side-by-side with the length of the graft extending from the septum to the bottom end of the first leg or from the septum to the top of the second leg. The legs then have a round cross section and assume the cross sectional shape of the vessel. An INDEPENDENT CLAIM is included for a method for bridging a bifurcated **aneurysm** in a blood vessel with the graft.

USE - For intraluminal delivery. For percutaneously treating abdominal aortic **aneurysms** located at a vessel bifurcation.

ADVANTAGE - Allows for positive position without the problems associated with joining multiple units of a graft.

DESCRIPTION OF DRAWING(S) - The figures show a front view of the expanded graft with both its legs in a non-inverted state prior to wrapping for insertion into the femoral artery, and a front view of the graft with one leg inverted after deployment:

pp; 5 DwgNo 1, 2/4

Title Terms: INVERT; BIFURCATE; BILATERAL; INTRA; AORTA; STENT; GRAFT; DELIVER; DEPLOY; METHOD

Derwent Class: P32

International Patent Class (Main): A61F-002/06

File Segment: EngPI



Set	Items	Description
S1	46	AU='LESCHINSKY B':AU='LESCHINSKY BORIS C O DATASCOPE INVES- TMENT CORP'
S2	6	S1 AND ANEURYSM?
S3	6	IDPAT (sorted in duplicate/non-duplicate order)
S4	5	IDPAT (primary/non-duplicate records only)

? show file

File 347:JAPIO Oct 1976-2002/Oct(Updated 030204)  
(c) 2003 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2003/Feb W02  
(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030213,UT=20030123  
(c) 2003 WIPO/Univentio

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200312  
(c) 2003 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209  
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Biblio  
Patents

6/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014822950 \*\*Image available\*\*  
WPI Acc No: 2002-643656/200269  
XRPX Acc No: N02-508747

**Preparation of environmentally-sensitive hydrogel polymer by allowing monomer and/or prepolymer to be crosslinked with crosslinker to form hydrogel, and treating hydrogel to render it environmentally sensitive**

Patent Assignee: MICRO VENTION INC (MICR-N); MICROVENTION INC (MICR-N)

Inventor: CONSTANT M J; CRUISE G M

Number of Countries: 100 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200271994	A1	20020919	WO 2002US5988	A	20020228	200269 B
US 20020176880	A1	20021128	US 2001804935	A	20010313	200281

Priority Applications (No Type Date): US 2001804935 A 20010313

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 200271994	A1	E	22 A61F-013/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020176880 A1 A61F-013/00

Abstract (Basic): WO 200271994 A1

NOVELTY - An environmentally-sensitive hydrogel polymer is prepared by forming a reaction mixture containing an environmentally sensitive monomer and/or prepolymer, a **crosslinker**, and an initiator; **crosslinking** the monomer and/or prepolymer with the **crosslinker** to form a hydrogel that will expand when immersed in an aqueous liquid; and treating the hydrogel to render it environmentally sensitive.

DETAILED DESCRIPTION - A method of preparing an environmentally-sensitive hydrogel polymer, comprising (a) forming a reaction mixture containing (i) an environmentally sensitive monomer and/or prepolymer, (ii) a **crosslinker**, and (iii) an initiator; (b) allowing the monomer and/or prepolymer to become **crosslinked** by the **crosslinker** to form a hydrogel that will expand when immersed in an aqueous liquid; and (c) treating the hydrogel to render it environmentally sensitive such that the environment in which the hydrogel resides affects the rate at which the hydrogel expands.

An INDEPENDENT CLAIM is included for a method of treating a disease, deformation or disorder of a human or veterinary patient by implantation of the hydrogel polymer at an implantation site within a patient's body, comprising (a) providing an amount of the hydrogel polymer that (i) occupies a first volume prior to implantation at the site and (ii) expands to a second volume, larger than the first volume, in response to an environmental condition that is present at the site; and (b) introducing the hydrogel polymer into the site such that it becomes exposed to the environmental condition present at the site and, in response to the environmental condition expands to the second volume.

USE - The inventive method is used in preparing an

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Date

environmentally-sensitive hydrogel polymer (claimed). The hydrogel polymer is used for biomedical applications (e.g., for treating **aneurysms**, fistulae, arterio-venous malformations, and for the immobilization or occlusion of blood vessels or other luminal anatomical structures).

ADVANTAGE - The inventive method produces hydrogels that exhibit controlled rates of expansion in response to changes in their environment.

DESCRIPTION OF DRAWING(S) - The figure is a flow diagram of a method of preparing an environmentally-responsive hydrogels.

pp; 22 DwgNo 1/2

Title Terms: PREPARATION; ENVIRONMENT; SENSITIVE; HYDROGEL; POLYMER; ALLOW; MONOMER; PREPOLYMER; **CROSSLINK**; **CROSSLINK**; FORM; HYDROGEL; TREAT; HYDROGEL; RENDER; ENVIRONMENT; SENSITIVE

Derwent Class: A96; B07; C07; D22; P32

International Patent Class (Main): A61F-013/00

International Patent Class (Additional): A61F-002/00; A61K-009/14;

A61K-009/70; A61K-031/74; A61K-047/48

File Segment: CPI; EngPI

6/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014797071 \*\*Image available\*\*

WPI Acc No: 2002-617777/200266

Related WPI Acc No: 2000-205910; 2002-517267

XRAM Acc No: C02-174577

XRPX Acc No: N02-488961

**Polymer depositing apparatus for hyper-vascular tumor embolization, injects into body space, fluent solutions that crosslink when mixed out of catheter**

*Bad Date*

Patent Assignee: INCEPT LLC (INCE-N)

Inventor: SAWHNEY A S; SPIRIDIGLIOZZI J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020082636	A1	20020627	US 98133950	A	19980814	200266 B
			US 99390046	A	19990903	
			US 2001990883	A	20011121	

Priority Applications (No Type Date): US 99390046 A 19990903; US 98133950 A 19980814; US 2001990883 A 20011121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020082636	A1		13	A61M-029/00	CIP of application US 98133950
					Cont of application US 99390046
					CIP of patent US 6152943
					Cont of patent US 6379373

Abstract (Basic): US 20020082636 A1

NOVELTY - A **catheter** (11) includes lumens which couple inlet ports to outlet ports. The **catheter** injects into a body space, fluent solutions that **crosslink** when mixed. The lumens prevent premature **crosslinking** of the solutions within the **catheter**.

USE - Polymer depositing apparatus for surgical intervention in arterio-venous malformation (AVM), or **aneurysm**, patent ductus arteriosus (PDA) by hyper-vascular tumor embolization using embolic material used in endovascular treatment in central nervous system such

as cyanoacrylate, ethylene-vinyl alcohol copolymer mixture, ethanol, estrogen, polyvinyl acetate, cellulose acetate polymer, polyvinyl alcohol, gelatin sponges, microfibrillar collagen, surgical silk sutures, detachable balloons, and coil and used in various biomedical applications such as e.g. soft contact lenses, wound management and drug delivery and also in therapeutic purpose and hydrogel delivery system.

**ADVANTAGE** - The inherent danger of embolizing downstream and causing infarcts and strokes can be minimized by use of appropriate **catheters**.

**DESCRIPTION OF DRAWING(S)** - The figure shows an explanatory diagram of the polymer deposition apparatus.

**Catheter** (11)

pp; 13 DwgNo 2/5

Title Terms: POLYMER; DEPOSIT; APPARATUS; HYPER; VASCULAR; TUMOUR; EMBOLISM ; INJECTION; BODY; SPACE; FLUENT; SOLUTION; **CROSSLINK** ; MIX; **CATHETER**

Derwent Class: B07; P34

International Patent Class (Main): A61M-029/00

File Segment: CPI; EngPI

6/5/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014696563 \*\*Image available\*\*

WPI Acc No: 2002-517267/200255

Related WPI Acc No: 2000-205910; 2002-617777

XRAM Acc No: C02-146370

XRPX Acc No: N02-409229

**Apparatus useful for depositing hydrogels comprises catheter , inlet and outlet ports and lumens**

Patent Assignee: CONFLUENT SURGICAL INC (CONF-N)

Inventor: SAWHNEY A S; SPIRIDIGLIOZZI J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6379373	B1	20020430	US 98133950	A	19980814	200255 B
			US 99390046	A	19990903	

Priority Applications (No Type Date): US 99390046 A 19990903; US 98133950 A 19980814

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6379373	B1	13	A61M-029/00	CIP of application US 98133950 CIP of patent US 6152943

Abstract (Basic): US 6379373 B1

**NOVELTY** - A **catheter** (11) having proximal (12) and distal (13) ends, two inlet (14,15) and outlet (16,17) ports at (12) and (13) adjacent to a balloon (26) for anchoring or an inflatable molding member and two lumens coupling (14,15) and (16,17) respectively. (11) injects two fluent solutions that **crosslink** into the space through the two lumens to avoid premature **crosslinking** within (11).

**DETAILED DESCRIPTION** - An apparatus (10) comprises a **catheter** (11) having proximal (12) and distal (13) ends, two inlet (14,15) and outlet (16,17) ports disposed at (12) and (13) respectively adjacent to a balloon (26) for anchoring or an inflatable molding member and two lumens coupling (14,15) and (16,17) respectively. (11) is configured to inject two fluent solutions that **crosslink** into the space

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Date

respectively through the two lumens to avoid premature **crosslinking** within (11).

USE - For depositing a polymer within a space inside a body (claimed) to occlude coat or support tissue. The polymer is preferably a hydrogel.

ADVANTAGE - The apparatus excludes **aneurysms** using hydrogels that are formed in situ without partially or completely occluding the vessel and uses multi-component hydrogel systems or embolic materials to occlude arteriovenous malformations.

DESCRIPTION OF DRAWING(S) - The figure shows a side view of an apparatus.

apparatus (10)  
  **catheter** (11)  
    proximal end (12)  
    distal end (13)  
    inlet ports (14,15)  
    outlet ports (16,17)  
    guidewire inlet port (21)  
    guidewire outlet port (25)  
    balloon (26)  
    radio-opaque marker. (27)  
pp; 13 DwgNo 1A/5

Title Terms: APPARATUS; USEFUL; DEPOSIT; HYDROGEL; COMPRISE; **CATHETER** ;  
  INLET; OUTLET; PORT; LUMEN  
Derwent Class: A96; B07; P34  
International Patent Class (Main): A61M-029/00  
File Segment: CPI; EngPI

6/5/4        (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
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014154372     \*\*Image available\*\*  
WPI Acc No: 2001-638591/200173  
XRAM Acc No: C01-188860  
XRPX Acc No: N01-477322

**Stent and graft device for treating aneurysmal wall of bodily vessel, contains crosslinking solution pumped out through lumen and port toward proximal end of catheter**

Patent Assignee: LESCHINSKY B (LESC-I)  
Inventor: LESCHINSKY B  
Number of Countries: 001    Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20010029349	A1	20011011	US 96631337	A	19960412	200173 B
			US 98165333	A	19981001	
			US 2001880241	A	20010613	

Priority Applications (No Type Date): US 2001880241 A 20010613; US 96631337 A 19960412; US 98165333 A 19981001

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20010029349	A1	13	A61M-029/00	Cont of application US 96631337 CIP of application US 98165333

Abstract (Basic): US 20010029349 A1

NOVELTY - Stent and graft device has a **catheter** (31B) with a longitudinal axis and lumen(s). A distal end of the **catheter** is connected to a **crosslinking** solution. An infusion and vacuum port

*the patent*

pumps out **crosslinking** solution through the lumen and port toward the proximal end of the **catheter** for **crosslinking** at least a portion of the vessel.

USE - Used for treating an **aneurysmal** wall of a bodily vessel (claimed).

ADVANTAGE - The device provides **crosslinking** solution that strengthens or toughens the **aneurysmal** wall by changing the nature of the wall, i.e. **crosslinking** the collagen in the wall.

DESCRIPTION OF DRAWING(S) - The figure is a longitudinal cross-sectional view of the **catheter**.

**Catheter** (31B)

Occlusion balloons (34, 35)

pp; 13 DwgNo 6/7

Title Terms: STENT; GRAFT; DEVICE; TREAT; WALL; BODY; VESSEL; CONTAIN;

**CROSSLINK** ; SOLUTION; PUMP; THROUGH; LUMEN; PORT; PROXIMITY; END;

**CATHETER**

Derwent Class: B05; B07; P34

International Patent Class (Main): A61M-029/00

File Segment: CPI; EngPI

6/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013607129 \*\*Image available\*\*

WPI Acc No: 2001-091337/200110

XRAM Acc No: C01-026889

XRPX Acc No: N01-069186

**System for localized delivery of genetic information to target locations within mammals, comprises insertable medical devices, biostable coating over part(s) of the device and genetic material**

Patent Assignee: SCIMED LIFE SYSTEMS INC (SCIM-N); BOSTON SCI LTD (BOST-N)

Inventor: PALASIS M

Number of Countries: 094 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200076573	A1	20001221	WO 2000US15102	A	20000602	200110 B
AU 200058681	A	20010102	AU 200058681	A	20000602	200121
EP 1189656	A1	20020327	EP 2000944611	A	20000602	200229
			WO 2000US15102	A	20000602	
US 6398808	B1	20020604	US 99333032	A	19990615	200242
JP 2003501221	W	20030114	WO 2000US15102	A	20000602	200306
			JP 2001502903	A	20000602	

Priority Applications (No Type Date): US 99333032 A 19990615

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200076573 A1 E 32 A61M-031/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200058681 A A61M-031/00 Based on patent WO 200076573

EP 1189656 A1 E A61M-031/00 Based on patent WO 200076573

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

US 6398808 B1 A61F-002/06

Bad  
dtl

Abstract (Basic): WO 200076573 A1

NOVELTY - A system for the localized delivery of genetic information to a target location within a mammalian body comprises:

- (a) a medical device insertable into the body;
- (b) a biostable coating over at least part of the device; and
- (c) genetic material incorporated into (b) prior to insertion of (a) into the body and released from (b) at the target location.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) localized delivery of genetic information to a target location within a mammalian body using the new system;

(2) a medical device having a freeze-dried coating on a portion of it

USE - The systems are used for the localized delivery of genetic information to a target location within a mammalian body (claimed). They may be used to treat, ameliorate and/or inhibit any lumen or tissue injury resulting in denuding of the interior wall of the lumen (the endothelium) such as the lining of a blood vessel, urethra, ureter, lung, colon, biliary tree, esophagus, prostate, fallopian tube, uterus or vascular graft including those injuries that result from diseases such as atherosclerosis and urethral hyperplasia and from mechanical injury from e.g. deployment of an endolumenal stent or a **catheter**-based device such as balloon angioplasty. They may be used to benefit cardiomyopathies, cardiac and cerebral strokes, embolisms, **aneurysms**, atherosclerosis and peripheral and cardiac ischemias by delivering genes encoding proteins competent to induce collateral blood vessel formation and to treat restenosis by delivering genes encoding proteins competent to interfere with neointimal (smooth muscle) cell proliferation. They may also be used to benefit biliary, uretal strictures and urogenital applications including therapies for incontinence and kidney stones by delivering genetic agents competent to induce an antibacterial, antiinflammatory or antiencrustation effect as well as to treat prostatitis, interstitial cystitis and other urogenital inflammatory disorders. They may be used to deliver antiproliferative agents in endometriosis therapies and genetic anticancer agents for therapy of bladder, prostate and uterine cancer.

ADVANTAGE - The systems avoid the potential problems associated with delivery from biodegradable polymers and provide localized delivery of genetic information in a controlled and reproducible manner.

DESCRIPTION OF DRAWING(S) - Medical device coated with a porous coating for the localized delivery of genetic information.

Coated vascular stent (100)  
stent structure (110)  
struts (120)  
biostable coating. (130)  
pp; 32 DwgNo 1/4

Title Terms: SYSTEM; LOCALISE; DELIVER; GENETIC; INFORMATION; TARGET;  
LOCATE; MAMMAL; COMPRISE; INSERT; MEDICAL; DEVICE; COATING; PART; DEVICE;  
GENETIC; MATERIAL

Derwent Class: A96; B04; B07; D16; D22; P31; P32; P34

International Patent Class (Main): A61F-002/06; A61M-031/00

International Patent Class (Additional): A61B-017/12; A61L-027/54;

A61L-029/16; A61L-031/16; A61M-005/158; A61M-025/00; A61M-029/02

File Segment: CPI; EngPI

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013492907

WPI Acc No: 2000-664850/200064

XRAM Acc No: C00-201317

XRPX Acc No: N00-492782

**Hydrophilic polymer coating for medical devices, e.g. catheter, for use in reducing or inhibiting matrix metalloproteinases in the body, comprises a matrix metalloproteinase inhibiting polymer composition**

Patent Assignee: GOODRICH CO B F (GOOR )

Inventor: DICKENS E D; KEMP S M; MARCHANT N S

Number of Countries: 089 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200056283	A1	20000928	WO 2000US7158	A	20000317	200064 B
AU 200037591	A	20001009	AU 200037591	A	20000317	200103

*Bad  
Data*

Priority Applications (No Type Date): US 99275314 A 19990324

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200056283 A1 E 46 A61K-009/00

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200037591 A A61K-009/00 Based on patent WO 200056283

Abstract (Basic): WO 200056283 A1

NOVELTY - A hydrophilic polymer coating for a medical device comprising a polymer composition capable of inhibiting the action of matrix metalloproteinases (MMP) in the body, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for delivery of a matrix metalloproteinase inhibiting substance to the interior of a body lumen, comprising providing the hydrophilic polymer coating on a surface of a stent body, introducing the stent transluminally into a selected portion of the body lumen, and radially expanding the stent into contact with the body lumen.

ACTIVITY - Antiarteriosclerotic; vasotropic; antiarthritic; cytostatic; gynecological; cardiovascular general.

MECHANISM OF ACTION - Inhibition of metalloproteinase.

USE - The composition is used as a coating for medical devices for reducing or inhibiting the undesired effects or activity of matrix metalloproteinases in the body. It is used in treating blood vessel disease, e.g. atherosclerosis, restenosis, or aortic aneurysm, treating or preventing surgical adhesions, in treating connective tissue disease, e.g. arthritis, osteoarthritis, and endometriosis, and for the treatment of cancer.

ADVANTAGE - The coating provides effective MPP inhibition. It is capable of decreasing local excess MMP (matrix metalloproteinase) breakdown of extracellular matrix (ECM) in the arteries, thus preventing or treating cardiac problems, e.g. restenosis, myocardial infarction, or unstable angina.

pp; 46 DwgNo 0/2

Title Terms: HYDROPHILIC; POLYMER; COATING; MEDICAL; DEVICE; CATHETER ;  
REDUCE; INHIBIT; MATRIX; BODY; COMPRISE; MATRIX; INHIBIT; POLYMER;  
COMPOSITION

Derwent Class: A14; A96; B05; B07; D22; P34

International Patent Class (Main): A61K-009/00

International Patent Class (Additional): A61L-031/00; A61P-009/10;



A61P-019/04; A61P-035/00; A61P-041/00  
File Segment: CPI; EngPI

6/5/7 (Item 7 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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013034059 \*\*Image available\*\*  
WPI Acc No: 2000-205910/200018  
Related WPI Acc No: 2002-517267; 2002-617777  
XRAM Acc No: C00-063627  
XRPX Acc No: N00-153153

**Delivery catheter for intraluminally delivering liquid components to form a hydrogel implant in situ, comprises lumens coupling inlet and outlet ports, respectively**

*Bad Date*

Patent Assignee: INCEPT LLC (INCE-N)  
Inventor: SAWHNEY A S; SPIRIDIGLIOZZI J  
Number of Countries: 023 Number of Patents: 005  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200009190	A1	20000224	WO 99US18521	A	19990813	200018 B
AU 9955623	A	20000306	AU 9955623	A	19990813	200030
US 6152943	A	20001128	US 98133950	A	19980814	200063
EP 1105180	A1	20010613	EP 99942190	A	19990813	200134
			WO 99US18521	A	19990813	
JP 2002522174	W	20020723	WO 99US18521	A	19990813	200263
			JP 2000564691	A	19990813	

Priority Applications (No Type Date): US 98133950 A 19980814

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200009190	A1	E 46	A61M-025/00	
Designated States (National): AU CA JP				
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE				
AU 9955623	A		A61M-025/00	Based on patent WO 200009190
US 6152943	A		A61M-029/00	
EP 1105180	A1	E	A61M-025/00	Based on patent WO 200009190
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE				
JP 2002522174	W		43 A61M-031/00	Based on patent WO 200009190

Abstract (Basic): WO 200009190 A1

NOVELTY - An apparatus for depositing a polymer within a space within a body comprises a **catheter** with proximal and distal ends, two proximal inlet ports, two distal outlet ports, and lumens coupling them. The **catheter** is configured to inject fluent solutions that **crosslink** when mixed, into the space, the lumens are configured so that premature **crosslinking** of the solutions does not occur in the **catheter**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for occluding or coating a space within a body or tissue lumen comprising

- (a) providing a delivery system that comprises the novel **catheter**;
- (b) positioning the distal end of the delivery system at a desired location in the space;
- (c) providing two fluent solutions;
- (d) injecting two fluent solutions via the delivery system into the space;
- (e) **crosslinking** the two fluent solutions to form a hydrogel in

situ in the space; and

(f) withdrawing the delivery system from the space.

USE - The apparatus is used for intraluminally delivering liquid components to form a hydrogel implant in situ. The multicomponent hydrogel systems are injected by the apparatus to act as an embolic material which occludes arteriovenous malformations or arteriovenous fistula. The hydrogels can also be used to exclude **aneurysms** without partially or completely occluding the vessel. The device can be used to occlude natural lumens for a therapeutic purpose.

DESCRIPTION OF DRAWING(S) - The figures show a side view and a cross-sectional view of a delivery **catheter** .

Delivery **catheter** (10)  
Multi-lumen **catheter** (11)  
Proximal end (12)  
Distal end (13)  
First and second inlet ports (14, 15)  
First and second outlet ports (16, 17)  
Tip (18)  
Lumens (19, 20)  
Guidewire inlet port (21)  
Balloon inflation port (22)  
Guideline outlet port (25)  
Balloon (26)  
Radio-opaque marker band (27)  
Guidewire (30)  
pp; 46 DwgNo 1A, 1B/5

Title Terms: DELIVER; **CATHETER** ; DELIVER; LIQUID; COMPONENT; FORM;  
HYDROGEL; IMPLANT; SITU; COMPRISE; LUMEN; COUPLE; INLET; OUTLET; PORT;  
RESPECTIVE

Derwent Class: A96; B07; D22; P31; P33; P34

International Patent Class (Main): A61M-025/00; A61M-029/00; A61M-031/00

International Patent Class (Additional): A61B-017/00; A61J-001/20;

A61M-025/01

File Segment: CPI; EngPI

6/5/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012077701 \*\*Image available\*\*

WPI Acc No: 1998-494612/199842

Related WPI Acc No: 1990-193414; 1994-035006; 1995-208225; 1995-208226;  
1995-375181; 1996-130504; 1997-022861

XRAM Acc No: C98-148873

XPX Acc No: N98-386351

**Multi step reaction for preparation of collagen-synthetic polymer matrices - useful in biocompatible implants and drug delivery systems**

Patent Assignee: COLLAGEN CORP (CLGE )

Inventor: BERG R A; RHEE W M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5800541	A	19980901	US 88274071	A	19881121	199842 B
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 94198812	A	19940218	
			US 94236769	A	19940502	
			US 95440863	A	19950515	
			US 97780470	A	19970108	

Priority Applications (No Type Date): US 94198812 A 19940218; US 88274071 A

19881121; US 89433441 A 19891114; US 92922541 A 19920730; US 94236769 A  
19940502; US 95440863 A 19950515; US 97780470 A 19970108

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing Notes
US 5800541	A		24	A61F-002/02		Cont of application US 88274071 Cont of application US 89433441 CIP of application US 92922541 Cont of application US 94198812 Div ex application US 94236769 Cont of application US 95440863 Cont of patent US 5162430 CIP of patent US 5328955 Div ex patent US 5475052

Abstract (Basic): US 5800541 A

Preparation of a collagen-synthetic polymer matrix carrying a biologically active agent or a glycosaminoglycan or derivative, comprises: (a) covalently binding collagen with a first multi-functionally activated synthetic hydrophilic polymer; (b) reacting the intermediate with a chemical substance (i.e. a second synthetic hydrophilic polymer, a chemical **crosslinking** agent, an esterifying agent, an amidating agent, an acylating agent, a functionally activated amino acid or a functionally activated peptide); and (c) binding a chemical substance (i.e. a biologically active agent or a glycosaminoglycan or derivative) to the matrix from (b). Also claimed are the polymer matrices produced and their use as implant coatings; and polymer matrices where most of the biologically active agent is on the surface of the matrix.

USE - The matrices can be used in drug delivery systems and to prepare implants for use in e.g. vascular grafts, artificial organs and heart valves. Implants for use in contact with blood may be coupled to e.g. antithrombotic agents. The matrices may be used to coat bone joints and prostheses, coiled Pt wires for treating **aneurysms**, breast implants, **catheters**, artificial organs, vascular grafts and stents, sutures and artificial ligaments or tendons.

Dwg.8/8

Title Terms: MULTI; STEP; REACT; PREPARATION; COLLAGEN; SYNTHETIC; POLYMER; MATRIX; USEFUL; BIOCOMPATIBLE; IMPLANT; DRUG; DELIVER; SYSTEM

Derwent Class: A96; B04; D22; G02; P32

International Patent Class (Main): A61F-002/02

International Patent Class (Additional): C08G-063/48

File Segment: CPI; EngPI

6/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011633833

WPI Acc No: 1998-050961/199805

Related WPI Acc No: 1997-191601

XRAM Acc No: C98-017352

XRPX Acc No: N98-040490

**Treatment of mammals using surface-coated prosthetic members - which are prepared by contacting the member with a composition comprising multimer(s) of fibrin degradation products**

Patent Assignee: UNIV MCMASTER (UYMC-N); ZYMOGENETICS INC (ZYMO )

Inventor: BISHOP P D; RUBENS F D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 680990	A1	19951108	EP 95103895	A	19950316	199549
AU 9515075	A	19951109	AU 9515075	A	19950324	199601
US 5475052	A	19951212	US 88274071	A	19881121	199604
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 94198128	A	19940217	
			US 94236769	A	19940502	

CA 2143923	A	19951103	CA 2143923	A	19950303	199611
JP 8053548	A	19960227	JP 95104476	A	19950427	199618
AU 698233	B	19981029	AU 9515075	A	19950324	199904
EP 680990	B1	20001018	EP 95103895	A	19950316	200053
MX 191754	B	19990415	MX 951715	A	19950407	200055
DE 69519124	E	20001123	DE 619124	A	19950316	200101
			EP 95103895	A	19950316	

Priority Applications (No Type Date): US 94236769 A 19940502; US 88274071 A 19881121; US 89433441 A 19891114; US 92922541 A 19920730; US 94198128 A 19940217

Cited Patents: 02Jnl.Ref; JP 62026230; US 5141747; US 5162430; WO 9401483; WO 9403155

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 680990	A1	E	33	C08H-001/06	
Designated States (Regional): AT DE ES FR GB IT					
AU 9515075	A			C08G-081/00	
US 5475052	A		23	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 Div ex application US 92922541 CIP of application US 94198128 CIP of patent US 5162430 Div ex patent US 5328955
CA 2143923	A			C08H-001/00	
JP 8053548	A		31	C08H-001/02	
AU 698233	B			C08G-081/00	Previous Publ. patent AU 9515075
EP 680990	B1	E		C08H-001/06	
Designated States (Regional): AT DE ES FR GB IT					
MX 191754	B			C08G-063/052	
DE 69519124	E			C08H-001/06	Based on patent EP 680990

Abstract (Basic): EP 680990 A

The following are claimed: (A) collagen-synthetic polymer matrix (CSPM), prep'd. by a process comprising: (a) reacting collagen with a first synthetic hydrophilic polymer (SHP1) to form a CSPM; and (b) further reacting the CSPM with a chemical substance selected from a second synthetic hydrophilic polymer (SHP2), a biologically active agent, a glycosaminoglycan (or a deriv. of this), a chemical **cross-linking** agent, an esterifying agent, an amidating agent, an acylating agent, an amino acid and/or a peptide. (B) matrix comprising collagen molecules covalently bound to synthetic hydrophilic polymer molecules, in which biologically active molecules are bound to the synthetic polymer molecules, and in which a majority of the biologically active molecules are bound to synthetic polymer molecules on the surface of the matrix.

USE - The matrices have low immunogenicity and can thus be used in a variety of medical applications, eg., in drug delivery systems or in the prepn. of various formed implants (eg. vascular grafts, artificial organs and heart valves). The matrices may also be used to coat synthetic implants such as bone and joint prostheses, coiled platinum wires for treating **aneurysms**, breast implants, **catheters**, sutures, artificial ligaments, etc.

ADVANTAGE - No further details.

Dwg. 7/7

Title Terms: NEW; COLLAGEN; SYNTHETIC; POLYMER; MATRIX; LOW; IMMUNOGENIC; PREPARATION; BIOCOMPATIBLE; IMPLANT

Derwent Class: A96; B07; D22; P34; P81

International Patent Class (Main): C08G-063/052; C08G-063/48; C08G-081/00; C08H-001/00; C08H-001/02; C08H-001/06

International Patent Class (Additional): A61K-047/42; A61K-047/48;

A61L-015/32; A61L-027/00; C07K-014/78; C07K-017/08; C08G-063/091;  
C08G-063/91; C08J-007/12; C08L-089/00; G02B-001/04  
File Segment: CPI; EngPI

6/5/11 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010238090 \*\*Image available\*\*  
WPI Acc No: 1995-139347/199518  
XRAM Acc No: C95-064349  
XRPX Acc No: N95-109528

Catheter for repairing vascular anomalies - having balloon with two  
inflatable portions, and lumen for supply of curable polymer for in situ  
hardening

Patent Assignee: SCIMED LIFE SYSTEMS INC (SCIM-N)  
Inventor: BILGE F; BUSCEMI P J; HOLMAN T J  
Number of Countries: 003 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9508289	A2	19950330	WO 94US9837	A	19940906	199518 B
WO 9508289	A3	19950420	WO 94US9837	A	19940906	199615
US 6299597	B1	20011009	US 93122918	A	19930916	200162
			US 95532257	A	19950922	
			US 97978190	A	19971125	

Priority Applications (No Type Date): US 93122918 A 19930916; US 95532257 A  
19950922; US 97978190 A 19971125

Cited Patents: No-SR.Pub; US 5123577; US 5261875

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9508289	A2	E 17	A61B-000/00	
			Designated States (National): DE JP	
WO 9508289	A3		A61B-000/00	
US 6299597	B1		A61M-029/00	Cont of application US 93122918 Cont of application US 95532257

Abstract (Basic): WO 9508289 A

A **catheter** for repairing vascular or similar anomalies includes a main body of tubing with lumens. A percutaneous **catheter** balloon at a distal end of the **catheter** includes first and second spaced and enlarged proximal and distal balloon end portions when inflated. Access to the lumens at the proximal end of the tubing is such that a lumen may be used to inflate/deflate the balloon, a lumen may be used to deliver polymeric material to the proximal enlarged end portion of the balloon, a lumen may be used as a vent and a lumen may be used to insert a fibre optic light source or the like into the balloon. Two devices are associated with the proximal end portion for communicating with the delivery and vent lumens respectively. The devices communicate between the lumens and a region outside the balloon, and are located between the first and second balloon end portions when inflated for the delivery of material between the portions. Also claimed is a method for repairing tissue defects, by: introducing a flow of curable material to the site of the defect using a **catheter**; shaping the material using the **catheter**; and activating the curing of the material in situ by light, heat or chemical agents applied through the **catheter**.

USE - The appts. and method are used for treating vascular diseases and anomalies (such as **aneurysms**, dissections, lesions and septal defects), by localised delivery of a liq. polymerisable or

**crosslinkable** material via percutaneous introduction of a **catheter** into a vessel (e.g. the femoral, brachial or carotid artery) followed by solidification of the prepolymer in situ to give a solid repair material at the site. The polymer materials may contain a drug, and act as a drug delivery matrix.

**ADVANTAGE** - Compared with surgical excision, and replacement of the vascular defects, the repair method is less traumatic to patients and requires less hospitalisation time and expense.

Dwg.2/9

Title Terms: **CATHETER** ; REPAIR; VASCULAR; ANOMALY; BALLOON; TWO; INFLATE; PORTION; LUMEN; SUPPLY; CURE; POLYMER; SITU; HARDEN  
Derwent Class: A96; B07; P31; P34  
International Patent Class (Main): A61B-000/00; A61M-029/00  
File Segment: CPI; EngPI

6/5/12 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009755155

WPI Acc No: 1994-035006/199404

Related WPI Acc No: 1990-193414; 1995-208225; 1995-208226; 1995-375181; 1996-130504; 1997-022861; 1998-494612

XRAM Acc No: C94-016178

**Non-immunogenic biocompatible polymer conjugates** - used for soft tissue augmentation and for coating or forming various articles

Patent Assignee: COLLAGEN CORP (CLGE )

Inventor: BENTZ H; BERG R A; BURNS R A; DAMANI R; DELUSTRO F; FRIES L;

MCCULLOUGH K; MICHAELS A S; RHEE W; WALLACE D G

Number of Countries: 020 Number of Patents: 012

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9401483	A1	19940120	WO 93US6292	A	19930701	199404 B
US 5292802	A	19940308	US 88274071	A	19881121	199410
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 92985680	A	19921202	
US 5308889	A	19940503	US 88274071	A	19881121	199417
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 92984197	A	19921202	
AU 9346620	A	19940131	AU 9346620	A	19930701	199422
US 5324775	A	19940628	US 88274071	A	19881121	199425
			US 89433441	A	19891114	
			US 92907518	A	19920702	
US 5328955	A	19940712	US 88274071	A	19881121	199427
			US 89433441	A	19891114	
			US 92922541	A	19920730	
EP 648239	A1	19950419	EP 93916926	A	19930701	199520
			WO 93US6292	A	19930701	
US 5413791	A	19950509	US 88274071	A	19881121	199524
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 94198128	A	19940217	
US 5446091	A	19950829	US 88274071	A	19881121	199540
			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 94198128	A	19940217	
			US 95368874	A	19950105	
US 5550188	A	19960827	US 88274071	A	19881121	199640

			US 89433441	A	19891114	
			US 92922541	A	19920730	
			US 94198128	A	19940217	
			US 95368874	A	19950105	
			US 95478510	A	19950607	
JP 8502082	W	19960305	WO 93US6292	A	19930701	199644
			JP 94503427	A	19930701	
AU 677789	B	19970508	AU 9346620	A	19930701	199727

Priority Applications (No Type Date): US 9325032 A 19930302; US 92907518 A 19920702; US 92922541 A 19920730; US 92984197 A 19921202; US 92984933 A 19921202; US 92985680 A 19921202; US 88274071 A 19881121; US 89433441 A 19891114; US 94198128 A 19940217; US 95368874 A 19950105; US 95478510 A 19950607

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9401483	A1	E	101	C08G-063/48	
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Designated States (National): AU JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

US 5292802	A		19	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 CIP of application US 92922541 CIP of patent US 5162430
US 5308889	A		23	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 CIP of application US 92922541 CIP of patent US 5162430
AU 9346620	A			C08G-063/48	Based on patent WO 9401483
US 5324775	A		22	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 CIP of patent US 5162430
US 5328955	A		17	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 CIP of patent US 5162430
EP 648239	A1	E		C08G-063/48	Based on patent WO 9401483
				Designated States (Regional): AT	BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
US 5413791	A		17	A61F-002/00	CIP of application US 88274071 CIP of application US 89433441 Div ex application US 92922541 CIP of patent US 5162430 Div ex patent US 5328955
US 5446091	A		16	C08G-063/48	CIP of application US 88274071 CIP of application US 89433441 Div ex application US 92922541 Div ex application US 94198128 CIP of patent US 5162430 Div ex patent US 5328955 Div ex patent US 5413791
US 5550188	A		19	G02C-007/04	CIP of application US 88274071 CIP of application US 89433441 Div ex application US 92922541 Div ex application US 94198128 Div ex application US 95368874 CIP of patent US 5162430 Div ex patent US 5328955 Div ex patent US 5413791 Div ex patent US 5446051
JP 8502082	W		92	C08B-037/00	Based on patent WO 9401483
AU 677789	B			C08G-081/00	Previous Publ. patent AU 9346620



Based on patent WO 9401483

Abstract (Basic): WO 9401483 A

A biocompatible, biologically inert conjugate (C) comprises a natural polymer or its deriv. chemically conjugated by an ether bond to a synthetic hydrophilic polymer.

Further claimed is a method for augmenting tissue in a mammal comprising admin. of a compsn. contg. an aq. mixt. of a natural polymer or its deriv. and an aq. compsn. of synthetic, non-immunogenic, hydrophilic polymer having a reactive gp. capable of forming a covalent ether bond in situ with the natural polymer, before **crosslinking** occurs between the natural and the synthetic polymer.

USE/ADVANTAGE - The conjugates and their compsns. can be combined with cytokines or growth factors to promote tissue growth and/or with other materials to increase the structural integrity of the compsns. so that they can be used in the augmentation of hard tissue, such as bone and cartilage. The conjugates can also be used as coatings for medical devices including **catheters**, bone implants and platinum wires to treat **aneurysms**. The covalent bonds in the conjugates can be used to provide a high degree of stability over long periods of time. The ether linkage used to connect the natural and synthetic polymers is resistant to breakage due to hydrolysis. The conjugates can be formed using a variety of natural and synthetic polymers, enabling the physical and chemical characteristics of the compsn. to be adjusted.

Dwg.0/17

Title Terms: NON; IMMUNOGENIC; BIOCOMPATIBLE; POLYMER; CONJUGATE; SOFT; TISSUE; AUGMENT; COATING; FORMING; VARIOUS; ARTICLE

Derwent Class: A96; B04; D22; P32; P81

International Patent Class (Main): A61F-002/00; C08B-037/00; C08G-063/48; C08G-081/00; G02C-007/04

International Patent Class (Additional): A61F-013/00; A61K-009/14; A61K-009/50; A61K-037/12; A61K-038/00; A61K-038/21; A61K-038/22; A61K-047/34; A61K-047/38; A61K-047/40; C08G-063/40; C08G-063/91; C08G-065/32; C08H-001/00

File Segment: CPI; EngPI

Set	Items	Description
S1	1360	ANEURYSM?
S2	123960	CROSSLINK? OR CROSS() (LINK OR LINKS OR LINKED OR LINKING? - ?)
S3	25048	CATHETER? ? OR CATHETHER? ?
S4	12	S1 AND S2 AND S3
S5	12	IDPAT (sorted in duplicate/non-duplicate order)
S6	12	IDPAT (primary/non-duplicate records only)

? show files

File 347:JAPIO Oct 1976-2002/Oct(Updated 030204)  
(c) 2003 JPO & JAPIO

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200312  
(c) 2003 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209  
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9/5,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01431921

**Novel embolizing compositions**  
**Embolisierende Zusammensetzungen**  
**Nouvelles compositions d'embolisation**

PATENT ASSIGNEE:

MICRO THERAPEUTICS, INC., (1815431), 1062-F Calle Negocio, San Clemente,  
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INVENTOR:

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Evans, Scott, 1252 Country Hills Drive, Santa Ana, California 92705, (US)

LEGAL REPRESENTATIVE:

Audier, Philippe Andre et al (91673), Brevaux, 3, rue du Docteur  
Lancereaux, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 1208855 A1 020529 (Basic)

APPLICATION (CC, No, Date): EP 2002075574 960729;

PRIORITY (CC, No, Date): US 507863 950727; US 508248 950727

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; SI

RELATED PARENT NUMBER(S) - PN (AN):

EP 847240 (EP 96925568)

INTERNATIONAL PATENT CLASS: A61L-024/08; A61L-024/04; A61L-027/00;  
A61L-031/00; **A61K-049/04**

ABSTRACT EP 1208855 A1

Disclosed are novel compositions for embolizing blood vessels which are particularly suited for treating vascular lesions via **catheter** delivery. In one embodiment, the compositions of this invention comprise a biocompatible polymer, a biocompatible solvent and a biocompatible water insoluble contrast agent characterized by having an average particle size of less than about 10 (mu)m. In another embodiment, the biocompatible polymer in these compositions is replaced with a biocompatible prepolymer.

ABSTRACT WORD COUNT: 70

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020529 A1 Published application with search report

Change: 020821 A1 Inventor information changed: 20020702

Examination: 021016 A1 Date of request for examination: 20020810

Change: 030108 A1 Legal representative(s) changed 20021119

LANGUAGE (Publication,Procedural,Application): English; English; English

9/5,K/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00903043

**Ultrasoft embolism devices**  
**Ultraweiche Embolievorrichtungen**

**Dispositifs d'embolie ultrasouples**

**PATENT ASSIGNEE:**

Target Therapeutics, Inc., (1310822), 47900 Bayside Parkway, Fremont, CA 94538, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;IE;IT;LI;NL;SE)

NEW YORK UNIVERSITY, (300274), 550 First Avenue, New York, NY 10016, (US)

, (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IE;IT;LI;NL;SE)

**INVENTOR:**

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Sepetka, Ivan, 1148 17th Avenue, Redwood City, California 94063, (US)

Chee, U. Hiram, 127 Dolton Avenue, San Carlos, California 94030, (US)

Zenzen, Wendy, 1568 Valley Crest Drive, San Jose, California 95131, (US)

**LEGAL REPRESENTATIVE:**

Price, Nigel John King (62102), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 824011 A1 980218 (Basic)

APPLICATION (CC, No, Date): EP 97118185 931015;

PRIORITY (CC, No, Date): US 978320 921118

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IE; IT; LI; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 623012 (EP 939239166)

INTERNATIONAL PATENT CLASS: **A61B-017/12**

**ABSTRACT EP 824011 A1**

This invention is a flexible, vaso-occlusive device. The device may be a chain (600) or a platinum braid (200) having an outside diameter less than about 0.010 inches. The device is sufficiently flexible and small that it may be hydraulically delivered to a site within the vasculature of the human body using an injected drug or fluid flush through a **catheter** (512).

ABSTRACT WORD COUNT: 63

**LEGAL STATUS (Type, Pub Date, Kind, Text):**

Examination: 010704 A1 Date of dispatch of the first examination report: 20010517

Application: 980218 A1 Published application (A1with Search Report ;A2without Search Report)

Examination: 980422 A1 Date of filing of request for examination: 980223

\*Assignee: 990707 A1 Applicant (name, address) (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9808	522
SPEC A	(English)	9808	4787
Total word count - document A			5309
Total word count - document B			0
Total word count - documents A + B			5309

INTERNATIONAL PATENT CLASS: **A61B-017/12**

...SPECIFICATION the vasculature of the human body using an injected drug or fluid flush through a **catheter**. In some configurations, the device may be delivered using pushers to mechanically deliver the device through the **catheter** lumen. Various mechanical connections may be used to sever the coil but a simple connection...

...of blood supply to tumors, and relief of vessel wall pressure in the region of **aneurysm** . A variety of different embolic agents are known as arguably suitable for such therapy.

One...

...microfibrillar collagen, various polymeric beads, and polyvinyl alcohol foam. The polymeric agents may be additionally **crosslinked** , sometimes in vivo, to extend the persistence of the agent at the desired vascular site. These agents are often introduced into the vasculature through a **catheter** . After such introduction, materials there form a solid space-filling mass. Although they provide good...

9/5,K/15 (Item 15 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00830070

**Balloon catheter with delivery side holes**

**Ballonkatheter mit Seitenabgabelochern**

**Catheter a ballon a trous d'administration laterales**

PATENT ASSIGNEE:

TARGET THERAPEUTICS, INC., (1310821), 47900 Bayside Parkway, Fremont, CA 94538, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

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LEGAL REPRESENTATIVE:

Price, Nigel John King (62102), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 769307 A2 970423 (Basic)  
EP 769307 A3 980114

APPLICATION (CC, No, Date): EP 96307300 961007;

PRIORITY (CC, No, Date): US 539943 951006

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE .

INTERNATIONAL PATENT CLASS: **A61M-025/10 ; A61M-029/02 ; A61M-025/00**

ABSTRACT EP 769307 A2

This is a medical **catheter** made up of a body having on its distal end portion an expandable balloon and, proximal of the balloon, a delivery lumen ending in a port through which therapeutic or diagnostic agents may be delivered. In one variation, a single inflation/wire lumen extends from the **catheter** proximal end to the **catheter** distal end, through which the balloon is inflated with pressurized fluid and through which a guide wire extends. The guide wire may have a valve plug for selectively seating against a valve seat of the **catheter** distal end to seal the inflation/wire lumen for balloon inflations. In another variation, a vaso-occlusive agent is disposable within a delivery lumen in a **catheter** coupled with a steerable guidewire. The delivery lumen ends in a delivery port near to and proximal of an expandable balloon located at the **catheter** 's end. A single inflation/wire lumen may also be provided for facilitating both balloon inflation and guide wire tracking.

ABSTRACT WORD COUNT: 161

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 020227 A2 Date of dispatch of the first examination  
report: 20020115  
Application: 970423 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Change: 980107 A2 Obligatory supplementary classification  
(change)  
Search Report: 980114 A3 Separate publication of the European or  
International search report  
Examination: 980520 A2 Date of filing of request for examination:  
980323  
\*Assignee: 990707 A2 Applicant (name, address) (change)  
LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION OF THE INVENTION

This invention is a medical device. More specifically, it is a balloon **catheter** having a lumen with a port proximal of a balloon through which therapeutic or diagnostic agents may be delivered.

SUMMARY OF THE INVENTION

...of the invention, a vaso-occlusive agent delivery assembly is provided having a balloon/delivery **catheter** with an expandable balloon on a distal end portion fluidly coupled to a proximal pressure...

...DESCRIPTION OF THE DRAWINGS

FIG. 1A shows a sectional side-view of a balloon/delivery **catheter** embodiment of the present invention.

FIG. 1B shows a sectional side-view of the balloon/delivery **catheter** of FIG. 1A in an alternative configuration.

FIG. 2 shows a diagrammatical perspective view of the distal end of a preferred guide wire assembly for use in the balloon/delivery **catheter** shown in FIGS 1A and 1B.

FIG. 3 shows a perspective view of a vaso...

...a vaso-occlusive agent is shown during delivery through a lumen of a

...the outer tubing, e.g., high density polyethylene (HDPE), low density polyethylene (LDPE), certain highly **cross linked** silicones, polyesters (including Nylon), polyvinyl chloride, high molecular weight polyurethanes, polyamides, polyimides, or suitable blends...

...it has a substantial axial strength and is therefore quite "pushable" and also maintains the **catheter** lumen open even under the severest of pressure. The distal portion of this **catheter** body is preferably of a flexible material, such as flexible derivatives of the materials just described, for instance low density polyethylene.

Although a two layered **catheter** body (109) is shown, inner tubing member (110) is not a required portion of the...

...novel apparatus is designed for use in delivering vaso-occlusive agents into target vessels or **aneurysms** that branch laterally off of the native trunk vessel and proximal to an expandable balloon of the **catheter**.

For example, such a delivery mechanism may be desirable where it is critical to ensure...

...undesirably inaccurate placement of the vaso-occlusive agent.

The expandable balloon of the balloon/delivery **catheter** is preferably placed distal to the desired branch or **aneurysm** and is there expanded,

at least to partially radially engage the vessel wall. Preferably the...

9/5,K/19 (Item 19 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00772611

**TARGETED DELIVERY VIA BIODEGRADABLE POLYMERS**  
**ZIELGERICHTE VERABREICHUNG MITTELS BIOLOGISCH ABBAUBARER POLYMERE**  
**ADMINISTRATION CIBLEE AU MOYEN DE POLYMERES BIODEGRADABLES**  
PATENT ASSIGNEE:

FOCAL, INC., (1853051), 4 Maguire Road, Lexington, MA 02173, (US),  
(Proprietor designated states: all)

INVENTOR:

ROTH, Laurence, A., 8 Jackman Ridge Road, Windham, NH 03087, (US)  
HERMAN, Stephen, Jack, 28 Summer Street, Andover, MA 01810, (US)

LEGAL REPRESENTATIVE:

Bassett, Richard Simon (52833), Eric Potter Clarkson, Park View House, 58  
The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 785774 A1 970730 (Basic)  
EP 785774 B1 010131  
WO 9611671 960425

APPLICATION (CC, No, Date): EP 95937688 951011; WO 95US14103 951011

PRIORITY (CC, No, Date): US 322092 941012

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1004293 (EP 99202631)

INTERNATIONAL PATENT CLASS: A61K-009/127 ; A61K-009/00

CITED PATENTS (EP B): WO 85/03640 A; WO 92/05866 A; WO 93/00051 A; WO  
95/22316 A

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 010131 B1 Granted patent

Application: 960724 A International application (Art. 158(1))

Lapse: 030205 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT  
20010131, BE 20011031, MC 20011011, PT  
20010430,

Lapse: 021023 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT  
20010131, ES 20010131, MC 20011011, PT  
20010430,

Lapse: 020306 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT  
20010131,

Oppn: 020102 B1 Opposition 01/20011031 Opposition filed  
OctoPlus Technologies B.V. (137140)  
Zernikedreef 12 P.O. Box 722 2300 AS Leiden NL  
(Representative:)Prins, Adrianus Willem (20903)  
Vereenigde, Nieuwe Parklaan 97 2587 BN Den  
Haag (NL)

Lapse: 020626 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT

20010131, ES 20010131, PT 20010430,  
 Lapse: 021120 B1 Date of lapse of European Patent in a  
 contracting state (Country, date): AT  
 20010131, MC 20011011, PT 20010430,  
 Application: 970730 A1 Published application (A1with Search Report  
 ;A2without Search Report)  
 Examination: 970730 A1 Date of filing of request for examination:  
 970506  
 Change: 980527 A1 Representative (change)  
 Examination: 990428 A1 Date of despatch of first examination report:  
 990311  
 Change: 991013 A1 Application number of divisional application  
 (Article 76) changed: 19990823  
 LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION 238,470 Nabel et al discloses administering transforming  
 vectors to arteries via a double-balloon **catheter** . A major limitation  
 to this method is that the genetic material is administered all at...  
 desired location; are capable of being delivered by techniques of minimum  
 invasivity, such as by **catheter** , laparoscope or endoscope. Types of  
 monomers, macromers, and polymers that can be used are described...the  
 characteristic pore sizes within the polymer, which is controlled by the  
 molecular weight between **crosslinks** and the **crosslink** density.  
 Deactivation of the entrapped material is reduced due to the immobilizing  
 and protective effect...

...a biodegradable oligomer; and each end cap is an oligomer, dimer or  
 monomer capable of **cross - linking** the macromers. In a particularly  
 preferred embodiment, the core includes hydrophilic poly(ethylene glycol)  
 oligomers...

...delivery devices for providing a polymer coating or layer on the surface  
 of tissues are **catheters** , laparoscopes, and endoscopes, as defined in  
 PCT/US94/94824 by Pathak et al.

Application of...

...administration of a polymeric material can be performed by loading the  
 composition in a balloon **catheter** , and then applying the composition  
 directly to the inside of a tissue lumen within a zone occluded by the  
**catheter** balloons. The tissue surface may be an internal or external  
 surface, and can include the...

...the context of transhepatic portosystemic shunting, dialysis grafts,  
 arteriovenous fistulae, and aortic and other arterial **aneurysms** . The  
 paving and sealing material of the process can also be used in ...the  
 "patching" of significant vessel dissection, the sealing of vessel wall  
 "flaps" either secondary to **catheter** injury or spontaneously occurring,  
 or the sealing of **aneurysmal** coronary dilations associated with various  
 arteritidies. Further, the method provides intraoperative uses such as  
 sealing...

9/5,K/23 (Item 23 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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00734628



Catheter tube and a method of processing the inner surface of a tube  
Katheterschlauch und Verfahren zur Behandlung der Innenwand eines  
Schlauches

Tube catheter et procede de traitement de la surface interieure d'un tube  
PATENT ASSIGNEE:

TERUMO KABUSHIKI KAISHA, (200694), 44-1 Hatagaya 2-chome Shibuya-ku,  
Tokyo, (JP), (applicant designated states: BE;DE;FR;GB;IT;NL;SE)

INVENTOR:

Ishida, Toshinobu, c/o Terumo K.K., 150, Maimaigi-cho, Fujinomiya-shi,  
Shizuoka, (JP)

LEGAL REPRESENTATIVE:

Casalonga, Axel et al (14511), BUREAU D.A. CASALONGA - JOSSE  
Morassistrasse 8, D-80469 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 692276 A2 960117 (Basic)  
EP 692276 A3 970507

APPLICATION (CC, No, Date): EP 95110664 950707;

PRIORITY (CC, No, Date): JP 94158957 940711

DESIGNATED STATES: BE; DE; FR; GB; IT; NL; SE

INTERNATIONAL PATENT CLASS: A61M-025/00 ; B29C-041/00; B29C-041/38

ABSTRACT EP 692276 A2

**Catheter** tube 2 has a multiple of small bead-like projections 21 formed on the inner surface. The inner surface of the tube 2 comprises projections 21 and flat areas 22. A guide wire inserted into the lumen 5 of the tube 2 contacts its inner surface only at the projections 21. The **catheter** tube 2 has the inner surface embossed in such a way that the guide wire can be manipulated with high efficiency even if the diameter of the tube is very small. (see image in original document)

ABSTRACT WORD COUNT: 104

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 010124 A2 Date of dispatch of the first examination  
report: 20001207

Application: 960117 A2 Published application (A1with Search Report  
;A2without Search Report)

Examination: 960117 A2 Date of filing of request for examination:  
950707

Search Report: 970507 A3 Separate publication of the European or  
International search report

Change: 970507 A2 Obligatory supplementary classification  
(change)

LANGUAGE (Publication,Procedural,Application): English; English; English

...and the lumen has caused the problem of lower steerability.

Another class of small-diameter **catheters** are **catheters** for use in cerebrovascular embolization which is typically applied to **aneurysms** and arterio-venous malformation. With their distal end inserted to either the lesion in the...

...in the form of beads that extend at an angle with the length of the **catheter** tube. The projections 21 also consists of two groups, 21a and 21b, that are oblique...as exemplified by polyolefins such as polyethylene, polypropylene, polybutene, ethylene-propylene copolymer, etc., mixtures thereof, **crosslinked** polyolefins produced by **crosslinking** those polyolefins or mixtures thereof, and thermoplastic resins such as polyamides, polyamide elastomers, etc. The...

9/5,K/26 (Item 26 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00697967

**Balloon catheter for occluding aneurysms or branch vessels**  
**Ballonkatheter zum Verschliessen von Aneurysmen oder Nebenblutgefassen**  
**Catheter a ballon d'obturation pour aneurismes ou vaisseaux lateraux**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 664104 A2 950726 (Basic)

EP 664104 A3 950920

EP 664104 B1 980930

APPLICATION (CC, No, Date): EP 95400059 950112;

PRIORITY (CC, No, Date): US 148374 940124

DESIGNATED STATES: BE; DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: A61M-025/10 ; A61B-017/12

ABSTRACT EP 664104 A2

A method and apparatus for delivering occluding agents through an opening in a blood vessel wall and into an **aneurysm** chamber or a branch vessel to occlude same employs a balloon **catheter**, inflating the balloon to seal the blood vessel lumen around the vessel opening, and delivering the occluding agent through the opening. The inflation of the balloon positions an exit port coupled to a delivery lumen laterally in the vessel in alignment with the vessel opening for delivering of the occluding agent therethrough. The inflated balloon maintains the occluding agent therein until it forms an occluding cast either in response to exposure to body fluids or radiation emitted from the **catheter**. The balloon may be shaped to form a blood perfusion passage and may be advanced over a guide wire. The distal **catheter** end may be rotated to align the delivery exit port with the **aneurysm** or branch vessel opening. More than one delivery exit port and associated lumen may be provided for venting during delivery and/or for the delivery of a two component occluding agent. Alternatively mechanical thrombus forming devices may be delivered thereby into the **aneurysm** chamber or branch vessel to occlude it.

ABSTRACT WORD COUNT: 198

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 950726 A2 Published application (Alwith Search Report  
;A2without Search Report)

Change: 950913 A2 International patent classification (change)

Change: 950913 A2 Obligatory supplementary classification  
(change)

Search Report: 950920 A3 Separate publication of the European or  
International search report

Examination: 960515 A2 Date of filing of request for examination:  
960320

Examination: 970305 A2 Date of despatch of first examination report:

preformed layer (172). (see image in original document)  
ABSTRACT WORD COUNT: 72

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 950426 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 950426 A1 Date of filing of request for examination:  
941020  
Examination: 971029 A1 Date of despatch of first examination report:  
970911

LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION artery in the arm or leg, up to the area of vessel occlusion, of a **catheter** with a small dilating balloon at its tip. The **catheter** is snaked through the arteries via direct fluoroscopic guidance and passed across the luminal narrowing of the vessel. Once in place, the **catheter** balloon is inflated to several atmospheres of pressure. This results in "cracking", "plastic" or otherwise...sectional area. In this "low profile" condition the mesh is placed in or on a **catheter** similar to those used for PTCA. The stent is then positioned at the site of...

...involve heating, cooling, mechanical deformation, e.g., stretching, or chemical reactions such as polymerization or **crosslinking**.

Suitable polymeric materials for use in the invention include polymers and copolymers of carboxylic acids...

...patching" of significant vessel dissection, the sealing of vessel wall "flaps", i.e. secondary to **catheter** injury or spontaneously occurring, the sealing of **aneurysmal** coronary dilations associated with various arteritidies. Further, PEPS provides intra-operative uses such as sealing ...a mock blood vessel made from transparent plastic tubing using a heat-balloon type deployment **catheter** reference to Fig. 17.

The balloon delivery **catheter** 170 is first positioned in the vessel 171 at the area of the occlusion. Before...

9/5,K/30 (Item 30 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00627745

ULTRASOFT EMBOLISM DEVICES

ULTRAWEICHE EMBOLIEVORRICHTUNG

DISPOSITIFS D'EMBOLIE ULTRASOUPLES

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 623012 A1 941109 (Basic)  
EP 623012 A1 950927  
EP 623012 B1 980513  
WO 9410936 940526  
APPLICATION (CC, No, Date): EP 93923916 931015; WO 93US9914 931015  
PRIORITY (CC, No, Date): US 978320 921118  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE  
INTERNATIONAL PATENT CLASS: **A61B-017/12**  
NOTE:

No A-document published by EPO  
LEGAL STATUS (Type, Pub Date, Kind, Text):  
Lapse: 20000202 B1 Date of lapse of European Patent in a  
contracting state (Country, date): GR  
19980513, LU 19981031, PT 19980813,  
Application: 940824 A International application (Art. 158(1))  
Lapse: 20000216 B1 Date of lapse of European Patent in a  
contracting state (Country, date): GR  
19980513, LU 19981031, PT 19980813,  
Application: 941109 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 941109 A1 Date of filing of request for examination:  
940715  
Change: 950920 A1 International patent classification (change)  
Search Report: 950927 A1 Drawing up of a supplementary European search  
report: 950814  
\*Search Report: 951213 A1 Drawing up of a supplementary European search  
report (change):  
\*Search Report: 960103 A1 Drawing up of a supplementary European search  
report (change): 951116  
Examination: 960612 A1 Date of despatch of first examination report:  
960425  
Grant: 980513 B1 Granted patent  
Oppn None: 990506 B1 No opposition filed  
Lapse: 990811 B1 Date of lapse of European Patent in a  
contracting state (Country, date): PT 19980813,

LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION the vasculature of the human body using an injected drug  
or fluid flush through a **catheter** . In some configurations, the device  
may be delivered using pushers to mechanically deliver the device through  
the **catheter** lumen. Various mechanical connections may be used to sever  
the coil but a simple connection...

...desirable. The device assumes a random mass of threadlike material after  
being ejected from the **catheter** tip at the chosen vascular site. The  
coil may be a single or of multiple...

...of blood supply to tumors, and relief of vessel wall pressure in the  
region of **aneurysm** . A variety of different embolic agents are known as  
arguably suitable for such therapy.  
One...

...microfibrillar collagen, various polymeric beads, and polyvinyl alcohol

foam. The polymeric agents may be additionally **crosslinked** , sometimes in vivo, to extend the persistence of the agent at the desired vascular site. These agents are often introduced into the vasculature through a **catheter** . After such introduction, materials there form a solid space-filling mass. Although they provide good...

9/5,K/31 (Item 31 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00623969

**Vascular dilatation instrument and catheter .**  
**Einrichtung zur vascularen Dilatation und Katheter.**  
**Dispositif de dilatation vasculaire et catheter .**

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PATENT (CC, No, Kind, Date): EP 608853 A2 940803 (Basic)  
EP 608853 A3 950802

APPLICATION (CC, No, Date): EP 94101117 940126;

PRIORITY (CC, No, Date): JP 9331473 930126

DESIGNATED STATES: BE; DE; FR; GB; IT; NL; SE

INTERNATIONAL PATENT CLASS: **A61M-029/02 ; A61M-025/00**

ABSTRACT EP 608853 A2

A vascular dilatation instrument 1 includes an outer tube 2, an inner tube 5 extending through the outer tube 2, and an inflatable member 3 having one end attached to the inner tube 5 and another end attached to the outer tube 2. The outer tube 2 includes a superelastic or pseudoelastic metal tube 2b and a synthetic resin tube 2a covering the metal tube, the metal tube 2b having a distal zone provided with a slit or perforations 2e so that the distal zone is more flexible and deformable than the remainder of the metal tube. Also provided is a **catheter** 100 comprising a main body section which includes a superelastic metal tube 101 and a synthetic resin layer 104 covering the metal tube, the metal tube 101 having a distal zone provided with a slit or perforations 106 so that the distal zone is more flexible and deformable than the remainder of the metal tube. (see image in original

document)  
ABSTRACT WORD COUNT: 164

LEGAL STATUS (Type, Pub Date, Kind, Text):

Assignee: 021009 A2 Transfer of rights to new applicant: TERUMO  
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NEC TOKIN Corporation (4092261) 7-1, Koriyama  
6-chome, Taihaku-ku Sendai-shi, Miyagi JP  
Application: 940803 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Search Report: 950802 A3 Separate publication of the European or  
International search report  
Examination: 960306 A2 Date of filing of request for examination:  
960108  
Examination: 981021 A2 Date of despatch of first examination report:  
980907

LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION improving blood flow to the peripheral side of the stricture. It also relates to a **catheter** intended to insert into fine blood vessels, for example, brain and heart vessels for curing...

...in the form of a metal wire (often a stainless steel wire) disposed around the **catheter** for preventing angular bending or collapse of the **catheter** and improving torque transmission while maintaining a flexible state.

With the recent advance of medical technology, it is now required to introduce a **catheter** into such a site as a smaller diameter vessel as found in the heart and brain. Diseases in cerebral vessels include **aneurysm**, arteriovenous malformation (AVM), and dual AVM. For inspection and treatment of such diseases, it is desired to have a **catheter** which can be inserted into a finer blood vessel or more peripheral blood vessel site.

However, the above-mentioned **catheter** has a main body portion made of a synthetic resin tube, which must have a...

DETAILED DESCRIPTION OF THE INVENTION

The vascular dilatation instrument of the present invention is described...polyolefins (e.g., polyethylene, polypropylene, and ethylene-propylene copolymers), polyvinyl chloride, ethylene-vinyl acetate copolymers, **crosslinked** ethylene-vinyl acetate copolymers, polyurethane, polyesters (e.g., polyethylene terephthalate), and polyamide elastomers, and silicone rubber and latex rubber. Preferred are the thermoplastic resins, especially **crosslinked** ethylene-vinyl acetate copolymers.

The inflatable member 3 includes tapered transition portions between the cylindrical...

9/5,K/34 (Item 34 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00410903  
BIODEGRADABLE POLYMERIC ENDOLUMINAL SEALING.

ENDOLUMINALE DICHTUNG MIT BISDEGRADIERBAREN POLYMEREN.

ETANCHEIFICATION A L'AIDE D'UN POLYMERE BIODEGRADABLE DE LA SURFACE  
INTERIEURE D'UNE LUMIERE D'UN ORGANE.

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 431046 A1 910612 (Basic)  
EP 431046 A1 910710  
EP 431046 B1 950503  
WO 9001969 900308

APPLICATION (CC, No, Date): EP 89909957 890823; WO 89US3593 890823

PRIORITY (CC, No, Date): US 235998 880824

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61M-029/00

CITED PATENTS (WO A): US 2642874 A; US 2854982 A; US 4636194 A; US 4739762  
A; US 4674506 A; US 4140126 A; US 4702917 A

CITED REFERENCES (EP A):

No further relevant documents have been disclosed.;

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 910612 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 910612 A1 Date of filing of request for examination:  
910221

Search Report: 910710 A1 Drawing up of a supplementary European search  
report: 910517

Examination: 921230 A1 Date of despatch of first examination report:  
921117

Grant: 950503 B1 Granted patent

Oppn None: 960424 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

...SPECIFICATION artery in the arm or leg, up to the area of vessel  
occlusion, of a **catheter** with a small dilating balloon at its tip. The  
**catheter** is snaked through the arteries via direct fluoroscopic guidance  
and passed across the luminal narrowing of the vessel. Once in place, the  
**catheter** balloon is inflated to several atmospheres of pressure. This  
results in "cracking", "plastic" or otherwise...sectional area. In this  
"low profile" condition the mesh is placed in or on a **catheter** similar  
to those used for PTCA. The stent is then positioned at the site of...

...involve heating, cooling, mechanical deformation, e.g., stretching, or  
chemical reactions such as polymerization or **crosslinking**.

Suitable polymeric materials for use in the invention include polymers  
and copolymers of carboxylic acids...

DIALOG(R)File 349:PCT FULLTEXT  
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00964085

**SINGLE LUMEN BALLOON CATHETER HAVING CHEMICAL-RESISTANT OR  
ADHERENCE-RESISTANT BALLOON SECTION.**

**CATHETER A BALLONNET ET A LUMIERE UNIQUE, PRESENTANT UNE PARTIE DE  
BALLONNET RESISTANTE AUX SUBSTANCES CHIMIQUES ET ANTIADHERENTE**

Patent Applicant/Assignee:

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US)

Patent Applicant/Inventor:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200296264 A2 20021205 (WO 0296264)

Application: WO 2002US15875 20020516 (PCT/WO US0215875)

Priority Application: US 2001865998 20010525; US 2001293479 20010525

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B**

Publication Language: English

Filing Language: English

English Abstract

This invention is a surgical device. In particular, it is low profile, single lumen **catheter** preferably having a movable seal or seat that allows the balloon to be inflated by sealing against the movable guidewire or against itself. An additional variation of the invention includes a non-removable guidewire situated in the **catheter** body in such a way to provide or add stiffness to the otherwise flexible distal section of the **catheter** during a procedure. An enhanced strain relief transition joint between significantly stiffer proximal section and the



more flexible distal section is provided. Finally, methods of using the inventive balloon **catheter** are also shown. The balloon is preferably produced of one or more materials that are resistant to components of chemical vaso-occlusive compositions or are resistant to adherence to those compositions.

Legal Status (Type, Date, Text)

Publication 20021205 A2 Without international search report and to be republished upon receipt of that report.

Correction 20030109 Corrected version of Pamphlet: pages 1/9-9/9, drawings, replaced by new pages 1/9-9/9; due to late transmittal by the receiving Office

Republication 20030109 A2 Without international search report and to be republished upon receipt of that report.

9/5,K/37 (Item 37 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00962622 \*\*Image available\*\*

**METHOD OF MANUFACTURING EXPANSILE FILAMENTOUS EMBOLIZATION DEVICES**  
**PROCEDE DE FABRICATION DE DISPOSITIFS D'EMBOLISATION FILAMENTEUX**  
**EXTENSIBLES**

Patent Applicant/Assignee:

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Legal Representative:

KLEIN Howard J (et al) (agent), Klein, O'Neill & Singh, 2 Park Plaza,  
Suite 510, Irvine, CA 92614, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200296302 A1 20021205 (WO 0296302)

Application: WO 2002US16873 20020529 (PCT/WO US0216873)

Priority Application: US 2001867340 20010529; US 2002157621 20020529

Designated States: AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY  
BZ CA CH CN CO CR CU CZ (utility model) CZ DE DK DM DZ EC EE (utility  
model) EE ES FI (utility model) FI GB GD GE GH GM HR HU ID IL IN IS JP KE  
KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL  
PT RO RU SD SE SG SI SK (utility model) SK SL TJ TM TN TR TT TZ UA UG UZ  
VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B-017/12**

International Patent Class: B29C-070/74

Publication Language: English

Filing Language: English

*Bad  
Date*

#### English Abstract

An embolization device (10) for occluding a body cavity includes one or more elongated, expansible, hydrophilic embolizing elements (12) non-releasably carried along the length of an elongated filamentous carrier (16) that is preferably made of a very thin, highly flexible filament or microcoil of nickel/titanium alloy. At least one expansile embolizing element is non-releasably attached to the carrier. A first embodiment includes a plurality of embolizing elements (12) fixed to the carrier (16) at spaced-apart intervals along its length. In second, third and fourth embodiments, an elongate, continuous, coaxial embolizing element is non-releasably fixed to the exterior surface of the carrier, extending along a substantial portion of the length of the carrier proximally from a distal tip, and optionally includes a luminal reservoir for delivery of therapeutic agents. Exemplary methods for making these devices include skewering and molding the embolizing elements. In any of the embodiments, the embolizing elements may be made of a hydrophilic, macroporous, polymeric, hydrogel foam material. In the second, third and fourth embodiments, the elongate embolizing element is preferably made of a porous, environmentally-sensitive, expansile hydrogel, which can optionally be made biodegradable and/or bioresorbable, having a rate of expansion that changes in response to a change in an environmental parameter, such as the pH or temperature of the environment.

#### Legal Status (Type, Date, Text)

Publication 20021205 A1 With international search report.

Publication 20021205 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

#### Detailed Description

... to devices for the occlusion of body cavities, such as in the embolization of vascular **aneurysms** and the like, and methods for making and using such devices. More specifically, the present invention relates to a device that is inserted into a body cavity, such as an **aneurysm**, to occlude the cavity by creating an embolism therein, a method for making the device...to control vascular bleeding, to occlude the blood supply to tumors, and to occlude vascular **aneurysms**, particularly intracranial **aneurysms**. In recent years, vascular embolization for the treatment of **aneurysms** has received much attention. Several different treatment modalities have been employed in the prior art...

...for example, describes a vascular embolization system that employs a detachable balloon delivered to the **aneurysm** site by an intravascular **catheter**. The balloon is carried into the **aneurysm** at the tip of the **catheter**, and is inflated inside the **aneurysm** with a solidifying fluid (typically a polymerizable resin or gel) to occlude the **aneurysm**. The balloon is then detached from the **catheter** by gentle traction on the **catheter**. While the balloon-type embolization device can provide an effective occlusion of many types of **aneurysms** or other body cavities, it is difficult to retrieve or move after the solidifying fluid...

...to expand to a size that cannot be inserted into Or moved easily through the **catheter**. However, once the device is emplaced in the cavity, its rate of hydration increases substantially...stabilizing agent and a polymer or copolymer of a free radical polymerizable hydrophilic olefin monomer **cross - linked** with up to about 10% by weight of a multiolefin-functional **cross - linking** agent. Such a material is described in U.S. Patent No. 5,750,585 - Park...least a portion of which

is sensitive to changes in an environmental parameter; (b) a **cross - linking** agent; and (c) a polymerization initiator. If desired, a porosigen (e.g., NaCl, ice crystals...groups (e.g., amines, carboxylic acids). For example, if acrylic acid is incorporated into the **crosslinked** network, the hydrogel is incubated in a low pH solution to protonate the carboxylic acids...

9/5,K/38 (Item 38 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00962621 \*\*Image available\*\*

**DETACHABLE TIP MICROCATHETER FOR USE OF LIQUID EMBOLIC AGENTS**  
**MICROCATHETER A BOUT DETACHABLE, DESTINE A ETRE UTILISE AVEC DES AGENTS**  
**EMBOLIQUES LIQUIDES**

*Bad Date*

Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200296301 A1 20021205 (WO 0296301)

Application: WO 2002CA815 20020603 (PCT/WO CA0200815)

Priority Application: US 2001294612 20010601

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B-017/12**

Publication Language: English

Filing Language: English

English Abstract

The present invention relates to microcatheters (8) with a detachable tip for administering liquid embolic agents. The detachable tip microcatheter for use with liquid embolic agents in treating an **aneurysm** comprises a body adapted to be introduced in a vascular cavity; a detachable tip portion mounted on a distal end of the body; and a detaching mechanism (16) mounted between the tip and the body for detaching the tip from the body, the tip portion being adapted to be positioned in use in the **aneurysm** to introduce the embolic agent into the **aneurysm**.

Legal Status (Type, Date, Text)

Publication 20021205 A1 With international search report.

Detailed Description

... embolic agents may have the potential to improve long-term results of endovascular treatment of **aneurysms**.

Endovascular treatment of acutely ruptured **aneurysms** with Guglielmi

Detachable Coils (GDCs) is both safe and effective (references 1-3). The ...19), Kerber (reference 20) and Debrun (reference 21), acrylics have never gained wide acceptance in **aneurysms**, mainly because of the risks of cerebral infarction from uncontrolled escape of the polymers during deposition. An added difficulty is the risk of gluing or cementing the **catheter** with the embolic material. An **aneurysm** model prone to recurrences following embolization has been developed (references 8, 9). Endovascular acrylic deposition...

#### EXAMPLE I

##### **Aneurysm** Glue Retention Device

##### Infusible Core- **Aneurysm** Coil/Polymeric Filler

With the advent of a number of polymeric glues and glue substitutes for neurologic use for the treatment of **aneurysms** and other vascular diseases there is a lack of safe and effective methods for the delivery of these substances within an **aneurysm** especially when longer times are required for the effective delivery of certain of these compounds...Polyester, etc.) coil tip 12 being long enough to have several loops form within the **aneurysm**, which would allow for blood flow control into the **aneurysm** (see Figs. 1 and 2). This coil tip 12 could also have several polymeric fibers...of an infusion region 14. This region would be placed near the dome of the **aneurysm** and glue or the equivalent would then be infused out of this infusion region 14...for detachment this would also seal the device closed via heating of the glue to **crosslink** it.

9/5,K/40

(Item 40 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00955439

#### **METHOD AND APPARATUS FOR DELIVERING MATERIALS TO THE BODY**

#### **PROCEDE ET APPAREIL D'ADMINISTRATION CORPORELLE DE MATIERES**

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GARRETT Arthur S (et al) (agent), Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200287416 A2 20021107 (WO 0287416)

Application: WO 2002US12981 20020425 (PCT/WO US0212981)

Priority Application: US 2001287029 20010426

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B**

Publication Language: English

Filing Language: English

English Abstract

*Bad Data*

An apparatus, method and composition for embolization of a vascular site in a blood vessel. The composition is introduced via **catheter** to the vascular site and activated by an activator introduced by the **catheter** or external means. The composition polymerizes or precipitates in situ via the activation provided by the **catheter** or external means.

Legal Status (Type, Date, Text)

Publication 20021107 A2 Without international search report and to be republished upon receipt of that report.

Detailed Description

... specifically, the present invention relates to embolizing blood vessels for treating vascular lesions such as **aneurysms**.

Background of the Invention

[003] Embolization of blood vessels can be conducted for a variety of purposes including the treatment of tumors, the treatment of lesions such as **aneurysms**, arteriovenous malformations (AVM), arteriovenous fistula (AVF), uncontrolled bleeding and the like.

[004] Embolization of blood vessels can be accomplished via **catheter** techniques which permit the selective placement of the **catheter** at the vascular site to be embolized. In this regard, recent advancements in **catheter** technology as well as in angiography now permit neuro endovascular intervention including the treatment of...the limitations on materials which can be used, (5) the potential for water entering the **catheter** and blocking the tip, or causing non-adhesion to the tissue or non-adhesion to itself, (6) a cumbersome delivery system designed to exclude water from the delivery **catheter** before and during injection, to keep the **catheter** stable during injection, and to keep the polymer in place until it sets up. Typical delivery time can be three hours.

...site. In certain embodiments, the activator can also be introduced by means other than the **catheter** (i.e. not introduced by the same **catheter**), or 6 external means such as an instrument to deliver focused ultrasound to the vascular...site in a blood vessel. In certain embodiments, the prepolymer can comprise a light-activated **cross - linking** material and/or a heat-activated **cross - linking** material. In certain embodiments, the prepolymer can be contained within microbeads. These microbeads can comprise...an apparatus for the embolization of a vascular site in a blood vessel comprises a **catheter** to deliver a prepolymer to the vascular site and a fiber optic, wherein the fiber optic is detachably connected to the **catheter**, whereby the prepolymer is adapted to at least partially polymerize in situ by introducing light waves from the fiber optic. In another embodiment, the apparatus comprises a **catheter**, a heating element, and a temperature sensing element, wherein the temperature sensing element provides temperature feedback to avoid at least partially polymerizing the prepolymer delivered by the **catheter**. In one non limiting embodiment, the heating element and the temperature sensing element can be positioned within the **catheter**, with the sensing element distal to the heating element.

9/5,K/43 (Item 43 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00939873

HYDROGELS THAT UNDERGO VOLUMETRIC EXPANSION IN RESPONSE TO CHANGES IN THEIR ENVIRONMENT AND THEIR METHODS OF MANUFACTURE AND USE  
HYDROGELS SUBISSANT UNE DILATATION VOLUMETRIQUE EN REPOSE A DES CHANGEMENTS DE LEUR ENVIRONNEMENT, ET LEURS PROCEDES DE FABRICATION ET D'UTILISATION

Bad  
Date

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200271994 A1 20020919 (WO 0271994)

Application: WO 2002US5988 20020228 (PCT/WO US0205988)

Priority Application: US 2001804935 20010313

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61F-013/00

International Patent Class: A61F-002/00 ; A61K-009/70 ; A61K-009/14 ;

A61K-031/74 ; A61K-047/48

Publication Language: English

Filing Language: English

English Abstract

Hydrogels that expand volumetrically in response to a change in their environment (e.g., a change in pH or temperature) and their methods of manufacture and use. Generally, the hydrogels are prepared by forming a liquid reaction mixture that contains a) monomer(s) and/or polymer(s) at least portion(s) of which are sensitive to environmental changes (e.g., changes in pH or temperature), b) a **crosslinker** and c) a polymerization initiator. If desired, a porosigen may be incorporated into the liquid reaction mixture to create pores. After the hydrogel is formed, the porosigen is removed to create pores in the hydrogel. The hydrogel may also be treated to cause it to assume a non-expanded volume in which it remains until a change in its environment causes it to expand. These hydrogels may be prepared in many forms including pellets, filaments, and particles. Biomedical uses of these hydrogels include applications wherein the hydrogel is implanted in the body of a patient and an environmental condition at the implantation site causes the hydrogel to expand it situ.

Legal Status (Type, Date, Text)

Publication 20020919 A1 With international search report.

Examination 20030123 Request for preliminary examination prior to end of  
19th month from priority date

Detailed Description

... be prepared and methods of using such hydrogels in biomedical applications (e.g. , the treatment of **aneurysms** , fistulae, arterio-venous malformations, and for embolization or occlusion of blood vessels or other luminal...

...of the polymer network. Typically, hydrogels of the prior art have been prepared by the **crosslinking** of monomers and/or polymers by radiation, heat, reduction-oxidation, or nucleophilic attack. Examples of the **crosslinking** of ethylenically unsaturated monomers include the preparation of contact lenses from 2-hydroxyethyl methacrylate and the preparation of absorbent articles from acrylic acid. Examples of **crosslinking** of polymers include wound dressings by **crosslinking** aqueous solutions of hydrophilic polymers using ionizing radiation and surgical sealants by **crosslinking** aqueous solutions of hydrophilic polymers modified with ethylenically unsaturated moieties.

In or about 1968, Krauch...

...cellular ingrowth and has controlled rate of expansion optimized for delivery through a microcatheter or **catheter** without the need for a non-aqueous solvent or a coating has not been developed...

9/5,K/44 (Item 44 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00937678

**DEVICES AND METHODS FOR TISSUE REPAIR**  
**DISPOSITIFS ET METHODES DE REPARATION TISSULAIRE**

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:

PASTERNAK Dagna S (agent), Robins & Pasternak LLP, 545 Middlefield Road, Suite 180, Menlo Park, CA 94025 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200269824 A1 20020912 (WO 0269824)

Application: WO 2002US7134 20020305 (PCT/WO US0207134)

Priority Application: US 2001800155 20010306

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B-018/18**

Publication Language: English

Filing Language: English

English Abstract

The invention discloses **catheter** assembly and methods of use, the

*Bad Data*

**catheter** (1) assembly comprising a single-lumen(5) **catheter** having one or more sources of electromagnetic radiation(15) disposed with the wall of the **catheter** .

Legal Status (Type, Date, Text)

Publication 20020912 A1 With international search report.

Publication 20020912 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20021212 Request for preliminary examination prior to end of 19th month from priority date

#### Detailed Description

##### FIELD OF THE INVENTION

Devices and methods for tissue repair are described. In particular, **catheters** that can transmit electro-magnetic radiation (e.g., ultraviolet light) to the distal end are described. Also described are methods of using these **catheters** .

...proper path through the vasculature I with the urging of the attending physician and the **catheter** slides along the guidewire once the proper path is established.

Because it is often desirable to use **catheters** to deliver multiple components to a target site, multi-lumen **catheters** have also been described. For example, for sealing **aneurysms** , multi-part materials including vaso-occlusive coils, two-part systems (e.g., adhesive systems such as fibrin based glues), UV curable materials and the like require multi-lumen **catheters** for delivery of these components. In addition, many of the **catheters** designed to deliver multi-component systems also require at least one mixing chamber, for example for mixing fibrin glue materials in situ. Multi-lumen **catheters** are described, for example, in U.S. Patent Nos. 5,797,869 to Martin et...

In another aspect, the invention includes an assembly for use in depositing material in a...

##### DESCRIPTION OF THE INVENTION

...used herein the term "polymerize" or "cure" refers to any forms of **cross - linking** , chain extension or the like. Thus, "photopolymerizable" refers to any material that can be **cross - linked** , extended or cured upon the addition of electro-magnetic radiation.

9/5,K/45 (Item 45 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00935498

**SYSTEMS DEVICES AND METHODS FOR INTRABODY TARGETED DELIVERY AND RELOADING OF THERAPEUTIC AGENTS**

**SYSTEMES, DISPOSITIFS ET PROCEDES D'ADMINISTRATION INTRACORPORELLE CIBLEE ET DE RECHARGEMENT D'AGENTS THERAPEUTIQUES**

Patent Applicant/Inventor:

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 , IL (Nationality)

Bad  
Date



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(Residence), US (Nationality)

Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200267849 A2 20020906 (WO 0267849)

Application: WO 2002IL149 20020226 (PCT/WO IL0200149)

Priority Application: US 2001270890 20010226

Designated States: AE AG AL AM AT (utility model) AU AZ BA BB BG BR BY BZ  
CA CH CN CO CR CU CZ (utility model) DE (utility model) DK (utility  
model) DM DZ EC EE ES FI (utility model) GB GD GE GH GM HR HU ID IL IN IS  
JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM  
PH PL PT RO RU SD SE SG SI SK (utility model) SL TJ TM TN TR TT TZ UA UG  
US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61K**

Publication Language: English

Filing Language: English

English Abstract

A biomedical system for targeted delivery of a therapeutic agent to a  
tissue region of a subject is provided. The biomedical system comprises:  
(a) a biomedical device including: (i) a device body designed and  
configured for implantation within the tissue region of the subject; and  
(ii) a first member of a binding pair attached to a surface of said  
device body; and (b) a delivery vehicle including: (i) a carrier particle  
designed for carrying the therapeutic agent; (ii) a second member of said  
binding pair attached to said carrier particle, said second member of  
said binding pair being capable of specifically interacting with said  
first member of said binding pair thereby enabling targeting of said  
delivery vehicle to said biomedical device when implanted within said  
tissue region.

Legal Status (Type, Date, Text)

Publication 20020906 A2 Without international search report and to be  
republished upon receipt of that report.

Examination 20030123 Request for preliminary examination prior to end of  
19th month from priority date

Detailed Description

... Coronary Angioplasty (PTCA), i.e., angioplasty, or "balloon treatment".  
This procedure involves inserting a balloon **catheter** via a peripheral  
artery, and advancing it toward the heart up to the diseased artery...

...is advantageous, since coupling may be done mildly, in physiological  
buffers if desired, using standard **crosslinking** technology. This  
eliminates the usual restriction that conjugation must be performed in  
very low ionic...g. for insulin-dependent diabetes); chitosan/gelatin  
microspheres (e.g. for controlled release of cimetidine);

**crosslinked** chitosan network beads with spacer groups; 1,5-diozapan one  
(DXO) and D,L-dilactide...the "patching" of significant vessel  
dissection, the sealing of vessel wall "flaps" either secondary to

catheter injury or spontaneously occurring, or the sealing of aneurysmal coronary dilations associated with various arteritidies. Likewise.

System 10 can also be used to provide...

9/5,K/55 (Item 55 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00899888 \*\*Image available\*\*

MECHANISM FOR THE DEPLOYMENT OF ENDOVASCULAR IMPLANTS

MECANISME DE DEPLOIEMENT D'IMPLANTS ENDOVASCULAIRES

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200232326 A2-A3 20020425 (WO 0232326)

Application: WO 2001US32588 20011018 (PCT/WO US0132588)

Priority Application: US 2000692248 20001018

Designated States: AE AG AL AM AT (utility model) AU AZ BA BB BG BR BY BZ  
CA CH CN CO CR CU CZ (utility model) DE DK DM DZ EC EE (utility model) ES  
FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG  
SI SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61B-017/12

Publication Language: English

Filing Language: English

English Abstract

A mechanism for the deployment of a filamentous endovascular device includes an elongate, flexible, hollow deployment tube having an open proximal end, and a coupling element attached to the proximal end of the endovascular device. The deployment tube includes a distal section terminating in an open distal end, with a lumen defined between the proximal and distal ends. A retention sleeve is fixed around the distal section and includes a distal extension extending a short distance past the distal end of the deployment tube. The endovascular device is attached to the distal end of the deployment tube during the manufacturing process by fixing the retention sleeve around the coupling element, so that the coupling element is releasably held within the distal extension of the deployment tube.

Bad  
Date

Legal Status (Type, Date, Text)

Publication 20020425 A2 Without international search report and to be  
republished upon receipt of that report.

Search Rpt 20020906 Late publication of international search report

Republication 20020906 A3 With international search report.

Examination 20021024 Request for preliminary examination prior to end of  
19th month from priority date

Detailed Description

... This invention relates to the field of methods and devices for the  
embolization of vascular **aneurysms** and similar vascular abnormalities.  
More specifically, the present invention relates to a mechanism for  
deploying...

...for example, describes a vascular embolization system that employs a  
detachable balloon delivered to the **aneurysm** site by an intravascular  
**catheter**. The balloon is carried into the **aneurysm** at the tip of the  
**catheter**, and it is inflated inside the **aneurysm** with a solidifying fluid  
(typically a polymerizable resin or gel) to occlude the **aneurysm**. The  
balloon is then detached from the **catheter** by gentle traction on the  
**catheter**. While the balloon-type 2 embolization device can provide an  
effective occlusion of many types of **aneurysms**, it is difficult to retrieve  
or move after the solidifying fluid sets, and it is...

9/5,K/57 (Item 57 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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*Bad  
Date*

00896704 \*\*Image available\*\*

**METHODS FOR TREATING ANEURYSMS**

**METHODES DE TRAITEMENT D'ANEVRISMES**

Patent Applicant/Assignee:

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1404, Alexandria, VA 22313-1404, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200230487 A2 20020418 (WO 0230487)  
Application: WO 2001US4951 20010308 (PCT/WO US0104951)  
Priority Application: US 2000239777 20001011  
Parent Application/Grant:  
Related by Continuation to: US 2000239777 20001011 (CIP)  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Main International Patent Class: **A61M**  
Publication Language: English  
Filing Language: English

#### English Abstract

This invention is directed to methods for treating **aneurysms** wherein the **aneurysmal** sac is filled with a non-particulate agent or plurality of such agents and/or with a fluid composition which solidifies in situ. Filling of the **aneurysmal** sac employs sufficient amount of the non-particulate agent or plurality of such agents and/or the fluid composition to inhibit blood flow into the **aneurysm** sac. In addition, the methods of this invention also provide for non-endogenous isolation of the parent artery proximal and distal to the **aneurysmal** sac from systemic blood flow of the treated mammal. The combination of these features provides for treatment of the **aneurysmal** sac while, at the same time, inhibiting **aneurysm** formation and/or regrowth in the diseased portions of the arterial wall proximal and distal to the treated **aneurysm**.

#### Legal Status (Type, Date, Text)

Publication 20020418 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20021017 Request for preliminary examination prior to end of 19th month from priority date

#### Detailed Description

##### METHODS FOR TREATING **ANEURYSMS**

FIG. 1 is a schematic side view of a balloon **catheter** for use in a method of treating an **aneurysm** according to one embodiment of the invention;

FIG. 2 is a schematic side view of an alternative embodiment of the balloon **catheter** of FIG. 1 with a double lumen;

FIG. ...a schematic side view of a stent for use in a method of treating an **aneurysm** according to the present invention;

2 0 FIG. 4 is a schematic side view of the stent of FIG. 3 positioned in the parent artery near an **aneurysm**; and

FIG. 5 is a schematic side view of the stent of FIG. 3 with the fluid composition being delivered to the **aneurysm** for treatment of the **aneurysm**.

Second, the methods described herein employ conventional endovascular

2 0 catheter techniques to direct a liquid permeable balloon catheter to the vascular site of the aneurysm . The liquid permeable balloon catheter preferably includes an inner impermeable saline filled balloon and an outer permeable balloon positioned coaxially around the inner balloon. Once the liquid permeable balloon catheter is placed at the selected vascular site, the inner balloon is inflated with saline to...

9/5,K/62 (Item 62 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00873434

**AN IMPLANTABLE OR INSERTABLE THERAPEUTIC AGENT DELIVERY DEVICE**  
**DISPOSITIF D'ADMINISTRATION D'AGENT THERAPEUTIQUE IMPLANTABLE OU INSERABLE**

Patent Applicant/Assignee:

SCIMED LIFE SYSTEMS INC, One Scimed Place, Maple Grove, MN 55311-1566, US  
, US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

PALASIS Maria, 65 Martin Road, Wellsley, MA 02481, US, US (Residence), US  
(Nationality), (Designated only for: US)

Legal Representative:

BRAINARD Charles R (et al) (agent), Kenyon & Kenyon, Suite 700, 1500 K.  
Street, S.W., Washington, DC 20005, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200205864 A1 20020124 (WO 0205864)

Application: WO 2001US21794 20010711 (PCT/WO US0121794)

Priority Application: US 2000615764 20000713

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61L-031/16

International Patent Class: A61L-031/14; A61L-029/16; A61L-029/14;

**A61K-009/00**

Publication Language: English

Filing Language: English

English Abstract

Disclosed herein is an implantable or insertable therapeutic agent delivery device comprising a coating material provided on at least a portion of said device, said coating material prohibiting substantial release therefrom of a therapeutic agent at or below about a physiological pH and allowing substantial release therefrom of a therapeutic agent at or above about said physiological pH. Also disclosed herein are coating materials for the implantable or insertable therapeutic agent delivery device. The coating materials are preferably polymers derivatized to contain moieties that are cationically charged at a pH below their pKa values and which thus can attract negatively charged therapeutically agents at pH values below their pKa values and which become predominantly uncharged at pH values above about their pKa values

*Bad Date*

and thus substantially release the negatively charged therapeutic agents at such pH values, which are preferably about physiological pH. Also disclosed are methods of derivatizing a polymer to contain such moieties and methods of providing a coating of the derivatized polymer onto at least a portion of a surface of an implantable or insertable therapeutic agent delivery device.

Legal Status (Type, Date, Text)

Publication 20020124 A1 With international search report.

Publication 20020124 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20020906 Request for preliminary examination prior to end of 19th month from priority date

Detailed Description

... includes the steps of impregnating a hydrogel polymer provided as a coating on a balloon **catheter** or other implantable or insertable medical device with an aqueous drug solution, inserting the **catheter** into a blood vessel at a desired location, and expanding the balloon portion of the **catheter** against the surrounding tissue to allow the release of the drug from the hydrogel polymer...the release in phosphate-buffered saline (PBS), pH 7.4, of methyl orange from balloon **catheters** provided with a coating of a hydrogel acrylic acid polymer derivatized with aminopropyl imidazole or...

...stents, stent grafts, biliary stents, colonic stents, bronchial/pulmonary stents, esophageal stents, and ureteral stents; **catheters**, including **catheters** having an expandable balloon portion, such as, for example, perfusion balloon **catheters** and needle injection **catheters**; filters such as blood clot filters; grafts such as vascular grafts and stent grafts; **aneurysm** filling coils and other coiled devices; transmyocardial revascularization ("TNW") devices; percutaneous myocardial revascularization ("PMR") devices...in a preferred embodiment of the present invention, an underivatized polymer, which may be in **crosslinked** or un- **crosslinked** form is applied to at least a portion of the surface of the implantable or...present invention.

9/5,K/63 (Item 63 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

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Data*

00866487 \*\*Image available\*\*

**MULTIPLE STIMULUS REVERSIBLE HYDROGELS**

**HYDROGELS REVERSIBLES PAR UNE PLURALITE DE STIMULI**

Patent Applicant/Assignee:

BATTELLE MEMORIAL INSTITUTE, Pacific Northwest Division, Intellectual Property Services, P.O. Box 999, Richland, WA 99352, US, US (Residence), US (Nationality)

Inventor(s):

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Legal Representative:

MAY Stephen R (agent), Battelle Memorial Institute, Pacific Northwest Division, Intellectual Property Services, P.O. Box 999, MSIN: K1-53, Richland, WA 99352, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200200193 A2-A3 20020103 (WO 0200193)  
Application: WO 2001US20183 20010621 (PCT/WO US0120183)  
Priority Application: US 2000603730 20000623

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: A61K-047/32

International Patent Class: A61K-009/20 ; A61K-009/08

Publication Language: English

Filing Language: English

English Abstract

A polymeric solution capable of gelling upon exposure to a critical minimum value of a plurality of environmental stimuli is disclosed. The polymeric solution may be an aqueous solution utilized in vivo and capable of having the gelation reversed if at least one of the stimuli fall below, or outside the range of, the critical minimum value. The aqueous polymeric solution can be used either in industrial or pharmaceutical environments. In the medical environment, the aqueous polymeric solution is provided with either a chemical or radioisotopic therapeutic agent for delivery to a specific body part. The primary advantage of the process is that exposure to one environmental stimuli alone will not cause gelation, thereby enabling the therapeutic agent to be conducted through the body for relatively long distances without gelation occurring.

Legal Status (Type, Date, Text)

Publication 20020103 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20020613 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20030103 Late publication of international search report  
Republication 20030103 A3 With international search report.

Detailed Description

... means a form of material between the liquid and solid state that consists of physically **crosslinked** networks of long polymer molecules with liquid molecules trapped within the network-a three-dimensional...

...temperature, pH or ionic strength.

U.S. Patent No. 4,732,930 discloses a chemically **cross - linked** gel composition comprised of a polymerized product that is obtained by polymerization of isopropylacrylamide monomer, a source of metal ions, a **crosslinking** agent and a liquid medium. The product exhibits a reversible phase transition function that results is introduced through a **catheter** running from the femoral artery to the brain).

PCT published application number WO 99156783 discloses a hydrogel for the treatment of **aneurysms**, whereby the gel carries both a radiopaque agent (permitting the radiogel to be visualized under fluoroscopy) and a therapeutic agent. The hydrogel is delivered through a **catheter** into an **aneurysm**, where the hydrogel becomes more viscous upon reaching body temperature or upon exposure to bodily fluids. The gelled compound blocks flow into the **aneurysm**, and can be adapted to deliver a human growth factor to promote growth of a cellular layer across the neck of the **aneurysm**.

9/5,K/67 (Item 67 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00832860 \*\*Image available\*\*

**BIOCOMPATIBLE MATERIAL COMPOSITION ADAPTABLE TO DIVERSE THERAPEUTIC INDICATIONS**

**PREPARATION DE MATERIAU ADAPTABLE A DIVERSES INDICATIONS THERAPEUTIQUES**

Patent Applicant/Assignee:

NEO MEND INC, 735 Palomar Avenue, Sunnyvale, CA 94086, US, US (Residence)  
, US (Nationality)

Inventor(s):

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CRUISE Gregory M, 25661 Via Viento, Mission Viejo, CA 92691, US,

Legal Representative:

RYAN Daniel D (et al) (agent), Post Office Box 26618, Milwaukee, WI 53226  
, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200166017 A1 20010913 (WO 0166017)

Application: WO 2001US5694 20010222 (PCT/WO US0105694)

Priority Application: US 2000520856 20000307

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B-017/00**

Publication Language: English

Filing Language: English

English Abstract

A biocompatible material genus (10) serves as the foundation for multiple material composition species (S2), (S3), each adapted to a specific therapeutic indication.

Legal Status (Type, Date, Text)

Publication 20010913 A1 With international search report.

Examination 20011213 Request for preliminary examination prior to end of  
19th month from priority date

Detailed Description

... filed November 6, 1998 and

*Rec'd  
Date*



entitled "Compositions, Systems, and Methods for Creating  
In Situ, Chemically **Cross - Linked** , Mechanical Barriers."

FIELD OF THE INVENTION

The invention generally relates to the  
composition of biocompatible...

...is effective, the persistence is brief.

The treatment of arterio-venous malformations (AVM's) and **aneurysms**  
provide further examples. AVM's are tangled masses of blood vessels that are  
neither arteries...

...a functionality of at least three. Upon mixing, the protein solution and  
the polymer solution **cross - link** to form a non-liquid, three-dimensional  
network.

In one embodiment, the network degrades over...

..discussed previously, the rate of gelation can be selected with the buffer  
system and the **cross linking** group of the polymer. Increased rates of  
gelation can be achieved by using carbonate buffers...site (e.g. , Species 1  
and 10) the material introducer/mixer 22 can include a **catheter** tube  
assembly 26 (see Fig. 3) that couples to the joiner 84. The **catheter** tube  
assembly 24 includes, at its distal end, a circumferentially spaced array of  
nozzles 34...

9/5,K/73 (Item 73 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00787494

**VASCULAR COATING COMPOSITION**

**COMPOSITION DE REVETEMENT VASCULAIRE**

Patent Applicant/Assignee:

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(Residence), US (Nationality)

Inventor(s):

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BLACK Kirby S, 1371 Peppergrass Trail, Acworth, GA 30101, US,

Legal Representative:

WILSON Mary J (agent), Nixon & Vanderhye P.C., Suite 800, 1100 North  
Glebe Road, Arlington, VA 22201-4714, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200119347 A1 20010322 (WO 0119347)

Application: WO 2000US25310 20000915 (PCT/WO US0025310)

Priority Application: US 99153950 19990915

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61K-009/14**

International Patent Class: C08L-089/00; C12N-011/14  
Publication Language: English  
Filing Language: English

#### English Abstract

This invention relates to methods of coating the luminal surface of a blood vessel, or other tissue cavity, and to compositions suitable for use in same.

#### Legal Status (Type, Date, Text)

Publication 20010322 A1 With international search report.

Examination 20010802 Request for preliminary examination prior to end of 19th month from priority date

#### Detailed Description

... wall.

The process of applying the coating of the invention can be carried out using **catheters** that may incorporate occlusion balloons. The distal end resides at the delivery site and the...

...patching" of significant vessel dissection, the sealing of vessel wall "flaps", i.e., secondary to **catheter** injury or spontaneously occurring, the coating of **aneurysmal** coronary dilations associated with various vascular diseases. Further, the present invention provides intra-operative uses...fresh endothelial cell growth media.

BIOLASTIC disk and collagen coating preparation BIOLASTIC is comprised of **crosslinked** bovine albumin. To prepare BIOLASTIC disks, a 45% solution of bovine albumin was pipetted, using...

9/5,K/88 (Item 88 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00568894 \*\*Image available\*\*

**DEVICE FOR LOCALLY DELIVERING A DRUG IN A BODY CAVITY**

**APPORT LOCAL DE MEDICAMENTS A EFFICACITE ELEVEE**

Patent Applicant/Assignee:

SCIMED LIFE SYSTEMS INC,

ST ELIZABETH'S MEDICAL CENTER INC,

Inventor(s):

PALASIS Maria,

WALSH Kenneth,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200032267 A2 20000608 (WO 0032267)

Application: WO 99US28544 19991203 (PCT/WO US9928544)

Priority Application: US 98204254 19981203

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ

BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT

SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **A61M-029/02**

Publication Language: English

English Abstract

A method of site-specifically delivering a therapeutic agent to a target location within a body cavity. The method comprises the steps of providing a medical device such as a **catheter** stent filter or vascular graft with a coating containing that agent. Introducing the medical device into the body cavity releasing a volume of the solution of therapeutic agent from the medical device by diffusion contacting the target site surface. In another embodiment, the present invention includes a system for delivering a therapeutic agent into a body cavity comprising a medical device injecting the agent via the needle.

Detailed Description

... in vivo adenoviral gene transfer has been accomplished with the use of site-specific delivery **catheters**. Independent of the local delivery device used, most studies have delivered viral doses ranging from...

The present invention is described herein with specific reference to an expandable **catheter** as the medical device. Other medical devices within the scope of the present invention include implantable devices such as needle injection **catheters**, hypodermic needles, stents, blood clot filters, vascular grafts, stent grafts, **aneurysm** filling coils, trans myocardial revascularization ("TMR11) devices, percutaneous myocardial revascularization (11PMR11) devices etc., as are known in the art.

...aqueous dispersion or emulsion of a polymer having organic acid functional groups and a polyfunctional **crosslinking** agent having functional groups capable of reacting with organic acid groups, as described in U...the polymer coating 130 is immersed in the drug solution, the extent of polymer coating **cross - linking**, the interactions between the polymer and drug (i.e., bonding, Van der Waals forces, charge...

9/5,K/89 (Item 89 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00568880 \*\*Image available\*\*

**RADIOPAQUE IMPLANTABLE COLLAGENOUS BIOMATERIAL DEVICE**

**DISPOSITIF AVEC BIOMATERIAU AU COLLAGENE IMPLANTABLE RADIO-OPAQUE**

Patent Applicant/Assignee:

COOK BIOTECH INCORPORATED,

BLEYER Mark W,

HILES Michael C,

PATEL Umesh H,

Inventor(s):

BLEYER Mark W,

HILES Michael C,

PATEL Umesh H,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200032253 A1 20000608 (WO 0032253)

Application: WO 99US27652 19991122 (PCT/WO US9927652)

Priority Application: US 98110407 19981201

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

*Bad Date*

LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ  
MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ  
CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: A61L-027/36

International Patent Class: A61L-029/00; A61L-031/00; **A61K-035/38**

Publication Language: English

#### English Abstract

Disclosed is a medical device (5) and more particularly, an implantable biomaterial. The biomaterial comprises a radiopaque (22) collagenous biomaterial (10).

#### Detailed Description

... systems. For example, coronary stents can be 1 0 inserted into coronary vessels via delivery **catheters** , such as balloon **catheters** . The ease of this delivery is facilitated in that the tips of the delivery **catheters** are often radiopaque, which provides visualization during standard radiographic inquiry.

...been manufactured using collagen molecules or collagenbased materials. Aldehydes, however, have been generally utilized to **cross - link** the collagen molecules to produce films having high tensile strengths. With these types of materials...

...as implants to replace or repair damaged or diseased tissue structures, for example, blood vessels, **aneurysms** , muscle, ligaments, tendons and the like. It is not uncommon today, for instance, for an...

9/5,K/93 (Item 93 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00545817 \*\*Image available\*\*

**METHODS AND APPARATUS FOR INTRALUMINAL DEPOSITION OF HYDROGELS**  
**PROCEDES ET APPAREIL DE DEPOT INTRALUMINAL D'HYDROGELS**

Patent Applicant/Assignee:

INCEPT LLC,

Inventor(s):

SAWHNEY Amarpreet S,

SPIRIDIGLIOZZI John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200009190 A1 20000224 (WO 0009190)

Application: WO 99US18521 19990813 (PCT/WO US9918521)

Priority Application: US 98133950 19980814

Designated States: AU CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE

Main International Patent Class: **A61M-025/00**

Publication Language: English

#### English Abstract

Methods and apparatus of forming hydrogel systems in situ are provided using a delivery system (10) configured to deliver two or more fluent pre-polymer solutions without premature **cross - linking** . The delivery system (10) comprises separate first and second lumens (23, 24) coupling

*Bad  
Date*

first, and second inlet ports (14, 15), first and second outlet ports (16, 17), respectively, and may include a balloon, flexible distal region, mixing chamber or steerable distal end. Multi-component hydrogel systems suitable for use with the inventive methods, and apparatus are also described.

#### Detailed Description

... Hydrogels for Drug Delivery,  
Technomic Pub. Co., Lancaster, PA (1993).

Hydrogels may be uncrosslinked or **crosslinked**.

Uncrosslinked hydrogels are able to absorb water but do not dissolve due to the presence...

U.S. Patent No. 5,785,679 to Abolfathi et al. describes methods and apparatus for excluding **aneurysms** with in-situ moldable agents, such as water-swellaable and thermally initiated hydrogels, by intraluminally...

Hydrogels suitable for use in accordance with the principles of the present invention preferably **crosslink** spontaneously without requiring the use of a separate energy source. Such systems allow good control of the **crosslinking** process, because gelation does not occur until the **catheter** is actuated and mixing of the two solutions takes place. If desired, one or both **crosslinkable** solutions may contain contrast agents or other means for visualizing the hydrogel implant.

9/5,K/101 (Item 101 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00525431

**HYDROGEL FOR THE THERAPEUTIC TREATMENT OF ANEURYSMS**  
**HYDROGEL ENTRANT DANS UNE THERAPIE D'ANEVRISMES**

Patent Applicant/Assignee:

MICRUS CORPORATION,

Inventor(s):

DERBIN J Todd,

KEN Christopher G M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9956783 A1 19991111

Application: WO 99US9492 19990429 (PCT/WO US9909492)

Priority Application: US 9871250 19980501

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU  
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **A61K-047/30**

International Patent Class: **A61K-047/32 ; A61K-047/34 ; A61K-047/36 ;  
A61K-047/38 ; A61K-038/18 ; A61K-038/20 ; A61K-039/395 ; A61K-033/24  
; A61K-047/02 ; A61K-038/18 ; A61K-033/24 ; A61K-038/20 ;  
A61K-033/24 ; A61K-039/395 ; A61K-033/24**

Publication Language: English

*Bad Date*

#### English Abstract

The hydrogel for the treatment of **aneurysms** acts as a carrier for both a radiopaque agent allowing the hydrogel to be visualized under fluoroscopy and a therapeutic agent such as one or more human growth factors. The hydrogel is delivered through a **catheter** into the **aneurysm**, where the hydrogel becomes more viscous upon reaching body temperature, or upon exposure to bodily fluids, to block blood flow into the **aneurysm**. In addition to stopping blood flow into the **aneurysm**, the delivery of human growth factors to the **aneurysm** site promotes the growth of a cellular layer across the neck of the **aneurysm**. The hydrogel may be of a type that dissolves over time or one which remains as a permanent occlusive agent within the **aneurysm**.

#### Detailed Description

HYDROGEL FOR THE THERAPEUTIC TREATMENT OF **ANEURYSMS**  
BACKGROUND OF THE INVENTION  
Field of the Invention.

This invention relates generally to treatment of vascular **aneurysms**, and more particularly concerns the use of hydrogels for use in occluding **aneurysms** and in controlled drug delivery for treatment of **aneurysms**.

...vasoocclusive devices can be accomplished by a variety of means, including via a 15 **catheter** in which the device is pushed through the **catheter** by a pusher to deploy the device. The vasoocclusive devices can be produced in such a way that they will pass through the lumen of a **catheter** in a linear shape and take on a complex shape as originally formed after being deployed into the area of interest, such as an **aneurysm**.

In current techniques, the vasoocclusive devices take the form of spiral wound wires that can...

...treatment of vascular disease by the formation of shaped articles to serve a mechanical function. **Catheters** have commonly been used to introduce such therapeutic agents locally at diseased occluded regions of ...

Collagen-hydroxyethyl-methacrylate (HEMA) hydrogel polymer is commonly formed from a gelled and **crosslinked** hydrophilic monomer solution to form 15 a three dimensional polymeric meshwork anchoring macromolecules. **Crosslinking** of the hydrophilic monomer solution can be accomplished by free radical polymerization of hydrophilic monomers...

9/5,K/105 (Item 105 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00518578 \*\*Image available\*\*

FLOW ARREST, DOUBLE BALLOON TECHNIQUE FOR OCCLUDING ANEURYSMS OR BLOOD VESSELS

ARRET DU FLUX, TECHNIQUE A DOUBLE BALLONNET PERMETTANT L'OCCLUSION D'ANEVRISMES OU DE VAISSEAUX SANGUINS

Patent Applicant/Assignee:

UNIVERSITY OF VIRGINIA PATENT FOUNDATION,  
HELM Gregory Anthony,

Bad Date

KALLMES David Forest,  
HANKINS Gerald Robert,  
Inventor(s):

HELM Gregory Anthony,  
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Patent and Priority Information (Country, Number, Date):

Patent: WO 9949930 A1 19991007

Application: WO 99US6804 19990330 (PCT/WO US9906804)

Priority Application: US 9879975 19980330

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU

LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA

UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU

TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG

CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: A61M-031/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7425

#### English Abstract

A method for occluding **aneurysms** or peripheral blood vessels is provided which follows for isovolumetric, isobaric delivery of occluding agents to **aneurysms** or peripheral blood vessels, wherein the **aneurysms** or peripheral blood vessels are isolated from the general circulation until the occluding agent has stabilized or until occlusion is effected. In particular, a double balloon method for occluding **aneurysms** or peripheral blood vessels is disclosed wherein a first balloon (1) is inserted into the **aneurysm** (7) or peripheral blood vessel to deliver an occluding agent, and a second balloon (9) is placed such that it substantially covers the neck of the **aneurysm** or peripheral blood vessel to substantially seal the **aneurysm** or peripheral blood vessel from the general circulation. Additionally, an **aneurysm** or peripheral blood vessel comprising a double balloon configuration useful for occluding **aneurysms** or peripheral blood vessels is disclosed.

#### Detailed Description

FLOW ARREST, DOUBLE BALLOON TECHNIQUE FOR OCCLUDING **ANEURYSMS** OR BLOOD VESSELS

##### FIELD OF THE INVENTION

This invention relates to the field of interventional...

...acetates, polyvinyl alcohols, and various other polymeric materials.

The polymeric agents may be additionally **crosslinked**, sometimes in vivo, to extend the persistence of the agent at the desired vascular site...

...agents are often introduced into the vasculature through the use of a balloon and/or **catheter**.

00517184      \*\*Image available\*\*

**LOCAL DELIVERY OF LONG LASTING THERAPEUTIC AGENTS**  
**APPORT LOCAL D'AGENTS THERAPEUTIQUES A ACTION PROLONGEE**

Patent Applicant/Assignee:

CONJUCHEM INC,  
EZRIN Alan M,  
MILNER Peter G,  
BRIDON Dominique P,  
HOLMES Darren L,

Inventor(s):

EZRIN Alan M,  
MILNER Peter G,  
BRIDON Dominique P,  
HOLMES Darren L,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9948536 A2 19990930

Application: WO 99US6344 19990323 (PCT/WO US9906344)

Priority Application: US 9878974 19980323; US 9886352 19980520; US  
9886205 19980521; US 98107391 19981106

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU

LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA

UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU

TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG

CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **A61K-047/48**

Publication Language: English

English Abstract

Methods of and compositions for localized delivery of therapeutic agents which are capable of forming covalent bonds with a site of interest are disclosed. Therapeutic agents useful in the invention include wound healing agents, antibiotics, anti-inflammatories, anti-oxidants, anti-proliferatives, immunosuppressants, anti-infective and anti-cancer agents.

Detailed Description

... THE INVENTION

The technology of local delivery of a therapeutic using drug  
1 5 delivery **catheters** or devices is well established. Under ideal  
circumstances, the therapeutic agent will remain near the...

...novel chemistry involved in the non-specific formation of covalent bonds  
using homo and heterobifunctional **cross - linking** reagents.

...potentially serious hemorrhage intrathoracically post cardiac surgery,  
intracranially following neurosurgery, or after repair of an **aneurysm**  
either intracranially, intrathoracically, or intraabdominally. 5. Ophthalmic  
Surgery The technology of this invention may be...

9/5,K/112      (Item 112 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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*Bad  
Date*



00479839      \*\*Image available\*\*

SYSTEM FOR IMPLANTING A CROSS - LINKED POLYSACCHARIDE FIBER AND METHODS  
OF FORMING AND INSERTING THE FIBER

SYSTEME D'IMPLANTATION D'UNE FIBRE DE POLYSACCHARIDE RETICULEE ET PROCEDES  
DE FORMATION ET D'INSERTION DE CETTE FIBRE

*Read  
Date*

Patent Applicant/Assignee:

BOSTON SCIENTIFIC CORPORATION,

Inventor(s):

MCCRORY Jennifer,

LuSCHER Patrik,

KAMATH Kalpana,

SAHATJIAN Ronald,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9911191 A1 19990311

Application: WO 98US17143 19980819 (PCT/WO US9817143)

Priority Application: US 97919107 19970828

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH

CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW

ML MR NE SN TD TG

Main International Patent Class: A61B-019/00

Publication Language: English

#### English Abstract

The present invention is systems and methods for implanting forming both a polysaccharide fiber (60), and an implant formed of the fiber. In one system (10) a liquid including polysaccharide, and a liquid including a **cross - linking** agent are mixed in a cannula (40) to form a **cross - linked** polysaccharide fiber in the cannula. In another system (10a), a carrier fluid delivers a previously manufactured fiber through a cannula (40a). A cutter (82) is optionally provided on the cannula to sever the fiber after a sufficient length of fiber is implanted. The methods include forming a polysaccharide fiber in the cannula while the cannula is inserted in a body, and a method of making a **cross - linked** polysaccharide fiber for loading in a delivery system.

#### Detailed Description

SYSTEM FOR IMPLANTING A **CROSS - LINKED** POLYSACCHARIDE FIBER  
AND METHODS OF FORMING AND INSERTING THE FIBER

This application is a continuation...

...to systems and methods for mixing a liquid including polysaccharide and a liquid including a **cross linking** agent to form a **cross linked** polysaccharide fiber.

...discovered that implants formed of these materials are particularly useful in the treatment of intracranial **aneurysms**.

...40 without both being on the same adapter 42.

Preferably, the cannula 40 is a **catheter** having sufficient flexibility to allow for insertion into predetermined areas in a body. For example, the cannula 40 could be a flexible **catheter**, such as a micro **catheter** sufficiently flexible to be inserted into the cranial area to treat an **aneurysm**. In addition, the cannula 40 could be an endoscopic device,

needle, or any other type...feeding into a single lumen segment (mixing chamber) at the distal tip portion of the **catheter** .

The distal end of the second tubular portion 52 extends further in the distal direction...

9/5,K/119 (Item 119 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00446243 \*\*Image available\*\*

**METHOD OF PRODUCING BIOMATERIALS**

**PROCEDE POUR PRODUIRE DES BIOMATERIAUX**

Patent Applicant/Assignee:

SISTERS OF PROVIDENCE IN OREGON,

GREGORY Kenton W,

Inventor(s):

GREGORY Kenton W,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9836707 A1 19980827

Application: WO 98US2243 19980206 (PCT/WO US9802243)

Priority Application: US 97798425 19970207; US 97798426 19970207

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FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH

DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR

NE SN TD TG

Main International Patent Class: **A61F-002/02**

Publication Language: English

English Abstract

It is a general object of the invention to provide a method of effecting tissue repair or replacement using a biomaterial. It is a specific object of the invention to provide a biomaterial suitable for use as a stent, for example, a vascular stent, or as conduit replacement, as an artery, vein or a ureter replacement. The biomaterial can also be used as a stent or conduit covering or lining. The present invention relates to a method of repairing, replacing or supporting a section of a body tissue. The method comprises positioning a biomaterial at the site of the section and bonding the biomaterial to the site or to the tissue surrounding the site. The bonding is effected by contacting the biomaterial and the site, or tissue surrounding the site, at the point at which said bonding is to be effected, with an energy absorbing agent. The agent is then exposed to an amount of energy absorbable by the agent sufficient to bond the biomaterial to the site or to the tissue surrounding the site.

Detailed Description

... are also diseases that are associated with weakness in the vessel wall that result in **aneurysms** that can ultimately rupture, as well as other events that are, at least in part...such as fallopian tubes, esophagus such as for esophageal varicies, ureter, artery such as for **aneurysm** , vein, stomach, lung, heart such as congenital cardiac repair, or colon repair or replacement, or...to use undenatured thrombin.

Following polymerization in the mold, the resulting biomaterial can be further **cross - linked** using gamma radiation or an agent such as glutaraldehyde (a solution of glutaraldehyde, formic acid...

...also be molded into tubular segments for example, by injecting the material into tubular molds. **Crosslinkage** of the elastin solution present between the inner and outer tubes can be effected prior...exposure of the tissue (eg, during a surgical procedures). In some cases, i.e. endovascular **catheter** -based treatments where open surgical exposure does not occur, the laser energy is directed to...or rectal fistulas. The biomaterial can also be used as a cerebrovascular patch for an **aneurysm** . The biomaterial can be sealed in place with targeted ...fusion. For applications where direct exposure is not possible or not desirable, a variety of **catheter** or endoscopic systems can be employed to direct the laser energy to the target site...

9/5,K/123 (Item 123 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00413737 \*\*Image available\*\*

**METHOD AND APPARATUS FOR INTRAVASCULAR EMBOLIZATION**  
**METHODE ET DISPOSITIF POUR EMBOLISATION INTRAVASCULAIRE**

Patent Applicant/Assignee:

MICRO THERAPEUTICS INC,  
JONES Michael L,  
GREFF Richard J,

Inventor(s):

JONES Michael L,  
GREFF Richard J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9804198 A1 19980205  
Application: WO 97US12221 19970721 (PCT/WO US9712221)  
Priority Application: US 96690075 19960731

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW  
MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN GH KE LS  
MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR  
IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: **A61B-017/12**

Publication Language: English

English Abstract

Disclosed is a method and apparatus to treat an **aneurysm** . The method involves the introduction of an embolic material into the **aneurysm** . The embolic material is adapted to permit tissue ingrowth within the region deformed by the **aneurysm** , which results in treatment of the **aneurysm** . Preferred embolic materials are those having an open cell structure, such as polyvinyl alcohol foams. Also disclosed is a **catheter** which may be used to introduce an embolic material into an **aneurysm** .

Detailed Description

... embolization, and in one application, to a method and apparatus for inserting material into an **aneurysmal** sac to promote thrombus formation or other healing mechanisms within the sac, thereby treating the **aneurysm** .

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...expandable material comprises an open-cell structure foam. In one embodiment the expandable material comprises **crosslinked** polyvinyl alcohol. The blood-soluble restraining agent comprises any of a variety of agents which...

#### Brief Description of the Drawings

Figure I is a side elevational view of a **catheter** adapted to introduce the **aneurysm** embolic material of the present invention.

9/5,K/130 (Item 130 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00349617

#### THE USE OF CROSS - LINKED HEMOGLOBIN IN TREATING SUBARACHNOID HEMORRHAGE UTILISATION D'HEMOGLOBINE RETICULEE DANS LE TRAITEMENT DES HEMORRAGIES SOUS-ARACHNOIDIENNES

Patent Applicant/Assignee:

BAXTER INTERNATIONAL INC,

Inventor(s):

BURHOP Kenneth E,

COLE Daniel J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9632130 A1 19961017

Application: WO 96US4776 19960408 (PCT/WO US9604776)

Priority Application: US 95419209 19950410

Designated States: AU CA JP NO AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL  
PT SE

Main International Patent Class: **A61K-038/16**

Publication Language: English

#### English Abstract

**Cross - linked** hemoglobin infusion following subarachnoid hemorrhage dramatically reduces the tissue area of hypoperfusion and reduces the extent of neuronal damage in the area of hypoperfusion. A therapeutically effective dose ranges from about 1000-5500 mg of body weight and may be administered up to 72 hours after the onset of hemorrhage.

#### Detailed Description

THE USE OF **CROSS - LINKED** HEMOGLOBIN IN TREATING SUBARACHNOID HEMORRHAGE ...occurs following breach of a blood vessel, as for example, in the rupture of an **aneurysm** in the arterial blood supply to the brain. The pooling of blood in the subarachnoid...

In...for reducing neuronal damage arising from post-hemorrhage vasospasm. In the present method, solutions of **cross - linked** hemoglobin are infused into a patient or other mammal after the onset or suspected onset...

...rat cranium showing the anatomical relation of the major structures of the brain to the **catheter** position for subarachnoid infusion of blood in the experimental model.

Figure 2a-e depicts in...

9/5,K/138 (Item 138 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00290140

**PERCUTANEOUS REPAIR OF CARDIOVASCULAR ANOMALIES AND REPAIR COMPOSITIONS  
REPARATION PERCUTANEE D'ANOMALIES CARDIO-VASCULAIRES ET COMPOSITIONS  
ASSOCIEES**

Patent Applicant/Assignee:

SCIMED LIFE SYSTEMS INC,

Inventor(s):

BUSCEMI Paul J,

BILGE Fertac,

HOLMAN Thomas J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9508289 A2 19950330

Application: WO 94US9837 19940906 (PCT/WO US9409837)

Priority Application: US 93122918 19930916

Designated States: DE JP

Main International Patent Class: **A61F-002/06**

International Patent Class: **A61F-02:54 ; A61M-29:00 ; A61M-31:00**

Publication Language: English

English Abstract

Percutaneous repair of cardiovascular anomalies via the introduction of a photoactivated biopolymer introduced to the affected site via a **catheter** system.

Detailed Description

... **CARDIOVASCULAR ANOMALEE S AND RE PAIR COMPOSITIONS**

**BACKGROUND OF THE INVENTION**

The incidence of vascular **aneurysms** is increasing due to improved longevity of the population as well as improvements in the...

...is directed towards the use of fluid polymer compositions for vascular repair and an accompanying **catheter** - system which is applicable to the percutaneous repair or vascular **aneurysms** , dissections and the like.

Specifically, this invention relates to vascular diseases and anomalies such as **aneurysms** , dissections, lesions and septal defects in which the afflicted area is not surgically excised and replaced but rather is repaired by the localized delivery of a fluid polynicrizable or **crosslinkable** material to the diseased site and the following stabilization of the polymer by photo-activation...

...is delivered to the site by accessing the vasculature via the percutaneous introduction of a **catheter** (specifically designed for this application) into a vessel such as the femoral, ...to the afflicted area, the fluid polymer may be molded via the use of the **catheter** . The pre-polymer is stabilized i.e. solidified in situ either by polymerization or **crosslinking** via the introduction of light or heat energy, chemicals, or chemical initiators. A relatively smooth...

9/5,K/140 (Item 140 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00277999 \*\*Image available\*\*

**EMBOLIZATION DEVICE**

**DISPOSITIF D'EMBOLISATION**

Patent Applicant/Assignee:

VITAPHORE CORPORATION,

Inventor(s):

MURPHY Aileen L,  
COBB Luther F,  
CONSTON Stanley R,  
MACIEL Mario,  
MOOLENAAR Jules,  
YAMAMOTO Ronald K,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9426175 A1 19941124

Application: WO 94US5079 19940506 (PCT/WO US9405079)

Priority Application: US 9358879 19930506

Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: A61B-017/12

Publication Language: English

**English Abstract**

A device for delivery of an embolization plug (15) into a biological vessel includes a tubular sheath (22) assembly and a flexible **catheter** (30) disposed therethrough. The **catheter** has a front end section (32) which is semicircularly arcuate when unconstrained and holds an embolization plug (15) near its front opening. The **catheter** can be rotated inside a vessel from its back end and the curvature of the arcuate front end section can be varied as the distance by which it extends from the sheath assembly is adjusted. The plug is pushed forward out of the **catheter** by a push rod (50) which is disposed in the lumen of the **catheter** and has a flexible front part which can move through the **catheter** without significantly affecting the arcuate configuration of its front tip section.

**Detailed Description**

...another procedure, which has been suggested, is to use a syringe to inject through a **catheter** a liquid suspension of particles or small "pledgets" manufactured from animal gelatin, but the use of a syringe to inject 20 suspended particles into a **catheter** limits the compression of the particles and the resultant mechanical fixation in-situ of the...objects can be accomplished, may be characterized as comprising a tubular sheath assembly, a flexible **catheter** disposed therethrough for loading an embolization plug near its front opening, and a deployment assembly for pushing the loaded plug out of the **catheter** through its front opening. The **catheter** has a front tip section which is semicircularly arcuate like a hook, when in an unconstrained condition. As the **catheter** is moved longitudinally through the sheath so as to vary the distance by which the...

...its distal end will be prevented from protruding from the front opening 31 of the **catheter** 30 and to thereby causing damage to the vessel. As soon as the plug 15...similar to Collastat in form and function), Semex Collagen Powder (Semex Medical, Inc.), etc. The **crosslinking** agent may be

formaldehyde vapor (FMV), glutaraldehyde or other agents familiar to those skilled in the art. **Crosslinking** effectively increases the strength (compression modulus) of the material, and slows its bioerosion in vivo.

9/5,K/143 (Item 143 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00258297

**EMBOLIZATION PLUGS FOR BLOOD VESSELS**

**BOUCHONS D'EMBOLISATION POUR VAISSEAUX SANGUINS**

Patent Applicant/Assignee:

VITAPHORE CORPORATION,

Inventor(s):

CONSTON Stanley R,

DAPPER Gregory S,

MURPHY Aileen Lum,

RAEDER-DEVENS Jenifer,

YAMAMOTO Ronald,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9406460 A1 19940331

Application: WO 93US8765 19930921 (PCT/WO US9308765)

Priority Application: US 92948235 19920921

Designated States: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ

LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA VN AT BE CH DE DK ES FR

GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: **A61K-037/08**

International Patent Class: A61C-15:01; A61L-17:00

Publication Language: English

**English Abstract**

A bioresorbable and hemostatic plug for embolization made from a collagen piece is compressed so as to be longitudinally insertable into a tubular biological vessel such as a blood vessel to be occluded. The collagen piece is capable of expanding radially inside the vessel by absorbing fluid such as the blood and thereby providing mechanical fixation in and occlusion of the vessel. Two such collagen pieces may be used with a spacer of a different material in between. Different kinds of therapeutic agents can be bonded to or physically absorbed by the collagen pieces so as to be delivered to the site of occlusion.

**Detailed Description**

... of saphenous vein side branches in a saphenous bypass graft procedure, neurovascular occlusion, chemoembolization, aortic **aneurysm** correction procedure, chronic venous insufficiency treatment, and renal embolization, Various means have been used in these applications to occlude blood vessels, such as by advancing a small diameter **catheter** from a distant vessel, inflating a small rubber balloon at the end of the **catheter** to mechanically wedge it into place in order to block the vessel, and thereafter withdrawing the **catheter**.

...like consistency when wet, the use of a syringe to inject suspended particles into a **catheter** limits the compression of the particles and the resultant mechanical fixation in-situ of the...flow of fluid such as blood through the vessel, The sponge-like material may comprise **cross - linked** collagen and may contain antibiotics or other kinds of drugs which may be

desirable at...similar to Collastat in form and function), Semex Collagen Powder (Semex Medical, Inc.), etc. The **crosslinking** agent may be formaldehyde vapor (FMV), glutaraldehyde or other agents familiar to those skilled in the art. **Crosslinking** effectively increases the strength (compression modulus) of the material, and slows its bioerosion in vivo.



9/TI/1 (Item 1 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Biomaterial system for in situ tissue repair

Biomaterialsystem für in-situ Gewebewiederherstellung

Système de matériaux biocompatibles pour la réparation in situ de tissus

9/TI/2 (Item 2 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Stent with collagen

Stent mit Kollagen

Extenseur au collagène

9/TI/4 (Item 4 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Mold for making an intraluminal stent

Form zum Herstellen eines intraluminalen Stents

Moule pour fabriquer un stent intraluminaire

9/TI/5 (Item 5 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Embolization device

Vorrichtung zur intravaskulären Embolisierung

Dispositif d'embolisation

9/TI/6 (Item 6 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

A catheter system

Kathetersystem

Système de cathéter

9/TI/7 (Item 7 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Catheter made of a multifilar row of wires

Katheter hergestellt aus einer Reihe von multifilamenten Drahten

Cathéter forme d'une rangée multibrins de fils

9/TI/8 (Item 8 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Expandable supportive bifurcated endoluminal grafts

Ausdehnbares, unterstützendes sowie verzweigtes endoluminales Transplantat

Greffon de maintien endoluminale extensible à deux branches

9/TI/9 (Item 9 from file: 348)

DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Covered self-expanding vascular occlusion device  
Beschichtete, selbstexpandierende ,vaskulare Okklusionsvorrichtung  
Dispositif d'occlusion vasculaire revetu et autoexpansible

9/TI/10 (Item 10 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

COMPOSITIONS FOR USE IN EMBOLIZING BLOOD VESSELS  
ZUSAMMENSETZUNGEN ZUR VERWENDUNG BEI DER EMBOLISIERUNG VON BLUTGEFASSEN  
COMPOSITIONS A UTILISER POUR L'EMBOISATION DE VAISSEAUX SANGUINS

9/TI/12 (Item 12 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

SELF-EXPANDING CARDIOVASCULAR OCCLUSION DEVICE  
SELBSTEXPANDIERENDE KARDIOVASKULARE OKKLUSIONSVORRICHTUNG  
DISPOSITIF AUTO-EXTENSIBLE POUR OCCLUSION CARDIO-VASCULAIRE

9/TI/13 (Item 13 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

DILATOR AND INTRODUCER ASSEMBLY  
DILATORS- UND EINFUHRERSANORDNUNG  
DISPOSITIF DILATATEUR ET INTRODUCTEUR

9/TI/14 (Item 14 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

EXPANDABLE SUPPORTIVE BIFURCATED ENDOLUMINAL GRAFTS  
AUSDEHNBARES, UNTERSTUTZENDES ZWEIGABELIGES ENDOLUMINALES TRANSPLANTAT  
GREFFON DE MAINTIEN ENDOLUMINAL EXTENSIBLE A DEUX BRANCHES

9/TI/16 (Item 16 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Multi-coating stainless steel guidewire  
Rostfreier Mehrfachbeschichtungs-Stahlführungsdraht  
Fil de guidage en acier inoxydable ayant un revêtement multicouche

9/TI/17 (Item 17 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Emboolic coils with offset helical and twisted helical shapes  
Emboliespirale mit abweichenden Achsen und gedrehten Formen  
Spirale embolique avec des formes d'helices desaxeées et vrillées

9/TI/18 (Item 18 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

System for the implantation of liquid coils with secondary shape  
System zum Implantieren von flüssigen Spiralen mit Sekundärstruktur  
Systeme pour l'implantation des bobines liquides avec structure secondaire

9/TI/20 (Item 20 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Drug eluting stent  
Eine Arznei eluierendes Stent  
Stent eluant un medicament

9/TI/21 (Item 21 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Method for making an intraluminal stent  
Herstellungsmethode für einen intraluminalen Stent  
Methode de fabrication pour un stent intraluminal

9/TI/22 (Item 22 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

STENT WITH COLLAGEN  
STENT MIT KOLLAGEN  
EXTENSEUR AVEC COLLAGENE

9/TI/24 (Item 24 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Vascular catheter  
Vaskularer Katheter  
Catheter vasculaire

9/TI/25 (Item 25 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Collagen-synthetic polymer matrices prepared using a multiple step reaction  
Matrizen auf Basis von Kollagen und synthetischem Polymer hergestellt unter  
Verwendung einer mehrstufigen Reaktion  
Matrices de collagene et de polymere synthetique preparees par reaction a  
etapes multiples

9/TI/27 (Item 27 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Glycosaminoglycan-synthetic polymer conjugates.  
Glukosominoglukan-synthetische-Polymer-Konjugaten.  
Conjugues de glycosominoglucanes et de polymeres synthetiques.

9/TI/29 (Item 29 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Vascular catheter  
Vaskularer Katheter  
Catheter vasculaire

9/TI/32 (Item 32 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

STENT AND METHOD FOR MAKING  
STENT UND VERFAHREN ZUM HERSTELLEN  
STENT ET PROCEDE DE FABRICATION ASSOCIE

9/TI/33 (Item 33 from file: 348)  
DIALOG(R)File 348:(c) 2003 European Patent Office. All rts. reserv.

Intravascular hydrogel implant  
Intravaskulares Hydrogel-Implantat  
Implant a hydrogel intravasculaire

9/TI/35 (Item 35 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

BALLOON CATHETER  
CATHETER A BALLONNET

9/TI/39 (Item 39 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MEDICAL DEVICE  
DISPOSITIF MEDICAL

9/TI/41 (Item 41 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MEDICAL DEVICE CHEMICALLY MODIFIED BY PLASMA POLYMERIZATION  
DISPOSITIF MEDICAL MODIFIE CHIMIQUEMENT PAR POLYMERISATION PLASMA

9/TI/43 (Item 43 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

HYDROGELS THAT UNDERGO VOLUMETRIC EXPANSION IN RESPONSE TO CHANGES IN THEIR  
ENVIRONMENT AND THEIR METHODS OF MANUFACTURE AND USE  
HYDROGELS SUBISSANT UNE DILATATION VOLUMETRIQUE EN REPONSE A DES  
CHANGEMENTS DE LEUR ENVIRONNEMENT, ET LEURS PROCEDES DE FABRICATION ET  
D'UTILISATION

9/TI/46 (Item 46 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

THERAPY FOR CEREBRAL VASOSPASM  
THERAPIE DU VASOSPASME CEREBRAL

9/TI/47 (Item 47 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DIFFERENTIAL DELIVERY OF NITRIC OXIDE  
ADMINISTRATION DIFFERENTIELLE D'OXYDE NITRIQUE

9/TI/48 (Item 48 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

LIPID-BASED NITRIC OXIDE DONORS  
DONNEURS DE MONOXYDE D'AZOTE A BASE DE LIPIDES

9/TI/49 (Item 49 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ANTIMICROBIAL PEPTIDES AND DERIVED METAPEPTIDES  
PEPTIDES ANTIMICROBIENS ET METAPEPTIDES DERIVES

9/TI/50 (Item 50 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SHAPE MEMORY POLYMER ACTUATOR AND CATHETER  
COMMANDE ET CATHETER POLYMERES A MEMOIRE DE FORME

9/TI/51 (Item 51 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

STENT DEVICES WITH DETACHABLE DISTAL OR PROXIMAL WIRES  
DISPOSITIFS D'ENDOPROTHESE A BOBINES DISTALES OU PROXIMALES AMOVIBLES

9/TI/52 (Item 52 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR VASCULAR RECONSTRUCTION OF DISEASED ARTERIES  
PROCEDES DE RECONSTITUTION VASCULAIRE D'ARTERES MALADES

9/TI/53 (Item 53 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS, COMPOSITIONS AND THERAPEUTIC APPLICATIONS RELATING TO FORTILIN (= TRANSLATIONALLY CONTROLLED TUMOR PROTEIN, TCTP) AND MODULATORS THEREOF  
PROCEDES ET COMPOSITIONS ASSOCIES A LA FORTILINE, UNE MOLECULE ANTI-APOPTOTIQUE, ET MODULATEURS DE FORTILINE

9/TI/54 (Item 54 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

NON-EXPANDED POROUS POLYTETRAFLUOROETHYLENE (PTFE) PRODUCTS AND METHODS OF MANUFACTURE  
PRODUITS EN POLYTETRAFLUORETHYLENE (PTFE) POREUX NON EXPANSE ET PROCEDES DE FABRICATION

9/TI/56 (Item 56 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

NON-OVERLAPPING SPHERICAL THREE-DIMENSIONAL VASO-OCCLUSIVE COIL  
BOBINE D'OCCLUSION VASCULAIRE SPHERIQUE TRIDIMENSIONNELLE DEPOURVUE DE CHEVAUCHEMENT

9/TI/58 (Item 58 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

DRUG DELIVERING PROSTHESES AND METHODS OF USE  
PROTHESES D'ADMINISTRATION DE MEDICAMENTS ET PROCEDES D'UTILISATION

9/TI/59 (Item 59 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

METHOD OF MAKING VASO-OCCLUSIVE COILS  
PROCEDE DE FABRICATION D'ENROULEMENTS POUR OCCLUSION VASCULAIRE

9/TI/60 (Item 60 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

VASO-OCCLUSIVE COILS WITH SELECTIVELY FLATTENED AREAS  
SPIRALES D'OCCLUSION VASCULAIRE PRESENTANT DES REGIONS APLATIES  
SELECTIVEMENT

9/TI/61 (Item 61 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

VARIABLE SOFTNESS VASO-OCCLUSIVE COILS  
SPIRALES D'OCCLUSION VASCULAIRE A SOUPLESSE VARIABLE

9/TI/64 (Item 64 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

INTRAVASCULAR FLOW MODIFIER AND REINFORCEMENT DEVICE  
MODIFICATEUR DE FLUX INTRAVASCULAIRE ET DISPOSITIF DE RENFORT

9/TI/65 (Item 65 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

COMPOSITIONS AND METHODS FOR ADMINISTRATION OF PHARMACOLOGICALLY ACTIVE  
COMPOUNDS  
COMPOSITIONS ET PROCEDES POUR L'ADMINISTRATION DE COMPOSES  
PHARMACOLOGIQUEMENT ACTIFS

9/TI/66 (Item 66 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

COATING THAT PROMOTES ENDOTHELIAL CELL ADHERENCE  
RETEMENT FAVORISANT LA FIXATION DES CELLULES ENDOTHELIALES

9/TI/68 (Item 68 from file: 349)  
DIALOG(R) File 349: (c) 2003 WIPO/Univentio. All rts. reserv.

EMBOLIC AGENTS VISIBLE UNDER ULTRASOUND  
AGENTS EMBOLIQUES VISIBLES PAR ULTRASON

9/TI/69 (Item 69 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ENDOVASCULAR MEDICAL DEVICE WITH PLURALITY OF WIRES  
DISPOSITIF MEDICAL ENDOVASCULAIRE DOTE DE PLUSIEURS FILS

9/TI/70 (Item 70 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

RADIOACTIVE COMPOSITIONS AND METHODS OF USE THEREOF  
COMPOSITIONS RADIOACTIVES ET METHODES D'UTILISATION

9/TI/71 (Item 71 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MEDICAL DEVICE  
DISPOSITIF MEDICAL

9/TI/72 (Item 72 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

FILAMENTOUS EMBOLIC DEVICE WITH EXPANSIBLE ELEMENTS  
DISPOSITIF D'EMBOLISATION FILAMENTEUX A ELEMENTS EXPANSIBLES

9/TI/74 (Item 74 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ANEURYSM EMBOLIZATION MATERIAL AND DEVICE  
MATIERE ET DISPOSITIF D'EMBOLISATION D'ANEVRISME

9/TI/75 (Item 75 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

LOCALIZED RELEASE OF GENETIC INFORMATION FROM BIOSTABLE COATING MATERIALS  
LIBERATION LOCALISEE D'UNE INFORMATION GENETIQUE TRANSPORTEE PAR DES  
MATERIAUX DE REVETEMENT BIOSTABLES

9/TI/76 (Item 76 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

POLYMER COVERED VASO-OCCLUSIVE DEVICES AND METHODS OF PRODUCING SUCH  
DEVICES  
DISPOSITIFS POUR OCCLUSION VASCULAIRE RECOUVERTS DE POLYMERES ET LEURS  
PROCEDES DE FABRICATION

9/TI/77 (Item 77 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

NOVEL HIGH VISCOSITY EMBOLIZING COMPOSITIONS  
NOUVELLES COMPOSITIONS D'EMBOLISATION DE GRANDE VISCOSITE

9/TI/78 (Item 78 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

PROTEIN STABILIZED PHARMACOLOGICALLY ACTIVE AGENTS, METHODS FOR THE  
PREPARATION THEREOF AND METHODS FOR THE USE THEREOF  
AGENTS A STABILISATION PROTEINIQUE ACTIFS PHARMACOLOGIQUEMENT; PROCEDES DE  
FABRICATION ET METHODES D'UTILISATION

9/TI/79 (Item 79 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR DELIVERING IN VIVO UNIFORM DISPERSED EMBOLIC COMPOSITIONS OF  
HIGH VISCOSITY  
METHODES D'ADMINISTRATION IN VIVO DE COMPOSITIONS D'EMBOISATION DE GRANDE  
VISCOSITE DISPERSEES DE MANIERE UNIFORME

9/TI/80 (Item 80 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR EMBOLIZING VASCULAR SITES WITH AN EMBOLIZING COMPOSITION  
METHODES D'EMBOISATION DE SITES VASCULAIRES AU MOYEN D'UNE COMPOSITION  
D'EMBOISATION

9/TI/81 (Item 81 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR FORMING A RADIOACTIVE STENT  
PROCEDES DE REALISATION D'UNE ENDOPROTHESE RADIOACTIVE

9/TI/82 (Item 82 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SELF-EXPANDING STENT WITH ENHANCED DELIVERY PRECISION AND STENT DELIVERY  
SYSTEM  
EXTENSEUR AUTOEXTENSIBLE A PRECISION D'IMPLANTATION AMELIOREE ET SYSTEME  
D'IMPLANTATION

9/TI/83 (Item 83 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR TREATING ENDOLEAKS DURING ENDOVASCULAR REPAIR OF ABDOMINAL  
AORTIC ANEURYSMS  
METHODES DE TRAITEMENT D'ENDOFUITES AU COURS DE LA REPARATION  
ENDOVASCULAIRE D'ANEVRISMES AORTIQUES ABDOMINAUX

9/TI/84 (Item 84 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHODS FOR INHIBITING THE FORMATION OF ENDOLEAKS ASSOCIATED WITH  
ENDOVASCULAR REPAIR OF ABDOMINAL AORTIC ANEURYSMS  
PROCEDES VISANT A INHIBER LA FORMATION D'ENDOFUITES ASSOCIEES A UNE  
REPARATION ENDOVASCULAIRE D'ANEVRISMES AORTIQUES ABDOMINAUX



9/TI/85 (Item 85 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

INHIBITION OF MATRIX METALLOPROTEINASES WITH POLYMERS AND PHARMACEUTICAL  
APPLICATIONS THEREOF  
INHIBITION DES METALLOPROTEINASES MATRICES PAR DES POLYMERES ET  
APPLICATIONS PHARMACEUTIQUES CORRESPONDANTES

9/TI/86 (Item 86 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHOD OF PRODUCING ELASTIN, ELASTIN-BASED BIOMATERIALS AND TROPOELASTIN  
MATERIALS  
PROCEDE DE PRODUCTION D'ELASTINE, DE MATERIAUX A BASE D'ELASTINE ET DE  
MATERIAUX A BASE DE TROPOELASTINE

9/TI/87 (Item 87 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

STENT GRAFTS WITH BIOACTIVE COATINGS  
PROTHESES ENDOVASCULAIRES A REVETEMENTS BIOACTIFS

9/TI/90 (Item 90 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

EMBOLIZATION DEVICE  
DISPOSITIF D'EMBOLISATION

9/TI/91 (Item 91 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DETACHABLE ANEURYSM NECK CLOSURE PATCH  
PIECE DE FERMETURE DETACHABLE POUR COLLET ANEVRYSMAL

9/TI/92 (Item 92 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SHAPE MEMORY POLYMER INTRAVASCULAR DELIVERY SYSTEM WITH HEAT TRANSFER  
MEDIUM  
SYSTEME D'ADMINISTRATION INTRAVASCULAIRE D'UN POLYMERE A MEMOIRE DE FORME  
AVEC SUPPORT DE TRANSFERT DE CHALEUR

9/TI/94 (Item 94 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MR-VISIBLE DEVICE FOR MAGNETIC STEREOTAXIS NEUROLOGICAL INTERVENTIONS  
DISPOSITIF VISIBLE PAR IRM POUR INTERVENTIONS NEUROLOGIQUES A STEREOTAXIE  
MAGNETIQUE

9/TI/95 (Item 95 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SYSTEMS AND METHODS FOR ELECTROSURGICAL TREATMENT OF TISSUE IN THE BRAIN  
AND SPINAL CORD  
SYSTEMES ET PROCEDES POUR LE TRAITEMENT ELECTROCHIRURGICAL DE TISSUS DANS  
LE CERVEAU ET LA MOELLE EPINIERE

9/TI/96 (Item 96 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

EXPANSIBLE IMPLANT FOR VASCULAR EMBOLIZATION AND METHOD OF MAKING THE SAME  
IMPLANT DILATABLE POUR L'EMBOISATION VASCULAIRE ET PROCEDE DE FABRICATION  
DE CE DERNIER

9/TI/97 (Item 97 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DETACHABLE, VARYING FLEXIBILITY, ANEURYSM NECK BRIDGE  
PONTAGE DE COLLET ANEURISMAL DETACHABLE ET A FLEXIBILITE VARIABLE

9/TI/98 (Item 98 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SELF EXPANDING BIFURCATED ENDOVASCULAR PROSTHESIS  
PROTHESE ENDOVASCULAIRE BIFURQUEE A DILATATION AUTOMATIQUE

9/TI/99 (Item 99 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MINIMALLY OCCLUSIVE FLOW DISRUPTOR STENT FOR BRIDGING ANEURYSM NECKS  
STENT MODIFICATEUR DE DEBIT A OCCLUSION MINIMALE POUR LE PONTAGE DE COLLETS  
D'ANEVRISME

9/TI/100 (Item 100 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ENDOVASCULAR THIN FILM DEVICES AND METHODS FOR TREATING AND PREVENTING  
STROKE

9/TI/102 (Item 102 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

STENT WITH SMOOTH ENDS  
EXTENSEUR POSSEDANT DES EXTREMITES LISSES

9/TI/103 (Item 103 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHOD AND APPARATUS FOR OCCLUSION AND REINFORCEMENT OF ANEURYSMS  
PROCEDE ET APPAREIL PERMETTANT L'OCCLUSION OU LA CONSOLIDATION D'ANEVRISMES

9/TI/104 (Item 104 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

APPARATUS AND METHOD FOR VASCULAR EMBOLIZATION  
APPAREIL ET PROCEDE D'EMBOISATION VASCULAIRE

9/TI/107 (Item 107 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

BIOLOGICAL MODIFICATION OF VASO-OCCLUSIVE DEVICES  
MODIFICATION BIOLOGIQUE DE DISPOSITIFS POUR OCCLUSION VASCULAIRE

9/TI/108 (Item 108 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ENDOLUMINAL VASCULAR PROSTHESIS  
PROTHESE VASCULAIRE ENDOLUMINALE

9/TI/109 (Item 109 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ANTIMICROBIAL PEPTIDES AND DERIVED METAPEPTIDES  
PEPTIDES ANTIMICROBIENS ET METAPEPTIDES DERIVES

9/TI/110 (Item 110 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

LUMINAL GRAFT, STENT OR CONDUIT  
GREFFON, EXTENSEUR OU CONDUIT LUMINAUX

9/TI/111 (Item 111 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SHEET METAL ANEURYSM NECK BRIDGE  
PONT DE COLLET D'ANEVRISME FORME D'UNE FEUILLE METALLIQUE

9/TI/113 (Item 113 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DETACHABLE ANEURYSM NECK BRIDGE  
PONT DETACHABLE DE COLLET D'ANEVRISME

9/TI/114 (Item 114 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DETACHABLE ANEURYSM NECK BRIDGE (II)  
PONTAGE DE COLLET D'ANEVRISME DETACHABLE (II)

9/TI/115 (Item 115 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DETACHABLE ANEURYSM NECK BRIDGE (I)  
DISPOSITIF DETACHABLE DE REFERMETURE DU COL D'UN ANEURISME

9/TI/116 (Item 116 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ARRANGEMENT FOR THE ENDOVASCULAR REPAIR OF A BLOOD VESSEL SECTION  
DISPOSITIF PERMETTANT UNE REPARATION INTRAVASCULAIRE D'UN SEGMENT DE  
VAISSEAU SANGUIN

9/TI/117 (Item 117 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

A RADIOPAQUE, BIORESORBABLE STENT, CREATED IN SITU  
EXTENSEUR BIORESORBABLE OPAQUE AUX RAYONS X, CREE IN SITU

9/TI/118 (Item 118 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

MICROFABRICATED THERAPEUTIC ACTUATORS  
ACTIONNEURS THERAPEUTIQUES MICRO-USINES

9/TI/120 (Item 120 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

METHOD FOR USING TROPOELASTIN AND FOR PRODUCING TROPOELASTIN BIOMATERIALS  
PROCEDE POUR UTILISER LA TROPOELASTINE ET POUR PRODUIRE DES BIOMATERIAUX A  
BASE DE TROPOELASTINE

9/TI/121 (Item 121 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

BIOMATERIAL SYSTEM FOR IN SITU TISSUE REPAIR  
SYSTEME DE MATERIAUX BIOCOMPATIBLES POUR LA REPARATION IN SITU DE TISSUS

9/TI/122 (Item 122 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SURGICAL METHOD AND COMPOSITION THEREFOR  
PROCEDE CHIRURGICAL ET COMPOSITION DESTINEE A UN TEL PROCEDE

9/TI/124 (Item 124 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

COMPOSITIONS FOR USE IN EMBOLIZING BLOOD VESSELS  
COMPOSITIONS A UTILISER POUR L'EMBOLISATION DE VAISSEAUX SANGUINS

9/TI/125 (Item 125 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

FOCALIZED INTRALUMINAL BALLOONS  
BALLONNETS INTRALUMINAUX-FOCALISES

9/TI/126 (Item 126 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

CATHETERS FOR GUIDING DRUGS BY DEPLOYABLE GROOVES  
CATHETERS POUR LE GUIDAGE DE MEDICAMENTS DANS DES SILLONS EXTENSIBLES

9/TI/127 (Item 127 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ENDOVASCULAR APPARATUS  
APPAREIL ENDOVASCULAIRE

9/TI/128 (Item 128 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

DILATOR AND INTRODUCER ASSEMBLY  
ENSEMBLE DILATATEUR ET D'INSERTION

9/TI/129 (Item 129 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

EXPANDABLE SUPPORTIVE BRANCHED ENDOLUMINAL GRAFTS  
GREFFON DE MAINTIEN ENDOLUMINAL RAMIFIE ET EXTENSIBLE

9/TI/131 (Item 131 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

THERAPEUTIC INHIBITOR OF VASCULAR SMOOTH MUSCLE CELLS  
INHIBITEUR THERAPEUTIQUE DES CELLULES DES MUSCLES VASCULAIRES LISSES

9/TI/132 (Item 132 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ENDOVASCULAR STENT WITH LOCKING RING  
EXTENSEUR ENDOVASCULAIRE A FREIN ANNULAIRE

9/TI/133 (Item 133 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

VASCULAR GRAFT AND DELIVERY CATHETER  
IMPLANT VASCULAIRE ET CATHETER D'IMPLANTATION

9/TI/134 (Item 134 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

ELASTIN, AND ELASTIN-BASED BIOMATERIALS AND PROCESS  
BIOMATERIAUX CONSTITUES D'ELASTINE OU A BASE D'ELASTINE ET PROCEDE ASSOCIE

9/TI/135 (Item 135 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

POLYMERIC MEDICAL DEVICE SYSTEMS HAVING SHAPE MEMORY  
SYSTEMES A MEMOIRE DE FORME POUR DISPOSITIFS MEDICAUX POLYMERES

9/TI/136 (Item 136 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

TREATMENT OF TISSUES TO REDUCE SUBSEQUENT RESPONSE TO INJURY  
PRETRAITEMENT DES TISSUS PERMETTANT DE REDUIRE LA REACTION SUITE A UNE  
BLESSURE

9/TI/137 (Item 137 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

SELF-EXPANDING INTRALUMINAL COMPOSITE PROSTHESIS  
PROTHESE COMPOSITE INTRALUMINALE AUTO-EXTENSIBLE

9/TI/139 (Item 139 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

POLYVALENT PEPTIDE PHARMACEUTICAL APPLICATIONS  
COMPOSITIONS PHARMACEUTIQUES A BASE DE PEPTIDES POLYVALENTS

9/TI/141 (Item 141 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

THERAPEUTIC INHIBITORS OF VASCULAR SMOOTH MUSCLE CELLS  
INHIBITEUR THERAPEUTIQUE DE CELLULES DE MUSCLES VASCULAIRES LISSES

9/TI/142 (Item 142 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

THERAPEUTIC INHIBITOR OF VASCULAR SMOOTH MUSCLE CELLS  
INHIBITEUR THERAPEUTIQUE DE CELLULES DES MUSCLES VASCULAIRES LISSES

9/TI/144 (Item 144 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

BIOCOMPATIBLE POLYMER CONJUGATES  
CONJUGUES POLYMERES BIOCOMPATIBLES

9/TI/145 (Item 145 from file: 349)  
DIALOG(R)File 349:(c) 2003 WIPO/Univentio. All rts. reserv.

PROTEIN- AND PEPTIDE-METAL ION PHARMACEUTICAL APPLICATIONS

Set	Items	Description
S1	3433	ANEURYSM?
S2	94646	CROSSLINK? OR CROSS() (LINK OR LINKS OR LINKED OR LINKING? - ?)
S3	27684	CATHETER? ? OR CATHETHER? ?
S4	685	S1 AND S2 AND S3
S5	826	S1(S) (S2 OR S3)
S6	175	S5 AND S4
S7	150	S6 AND IC=(A61M OR A61K OR A61F OR A61B)
S8	150	IDPAT (sorted in duplicate/non-duplicate order)
S9	145	IDPAT (primary/non-duplicate records only)

? show files

File 348:EUROPEAN PATENTS 1978-2003/Feb W02

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030213,UT=20030123

(c) 2003 WIPO/Univentio



Bibliography

6/5/1 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2003 Inst for Sci Info. All rts. reserv.

00979531 Genuine Article#: FL241 Number of References: 27  
**Title: HYLAN GEL COMPOSITION FOR PERCUTANEOUS EMBOLIZATION**  
Author(s): LARSEN NE; LESHCHINER EA; PARENT EG; HENDRIKSONAHO J; BALAZS EA;  
HILAL SK  
Journal: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, 1991, V25, N6, P699-710  
Language: ENGLISH Document Type: ARTICLE  
Geographic Location: USA  
Abstract: Viscoelastic, pseudoplastic, radiopaque injectable hylan gel for percutaneous embolization was developed and evaluated by in vitro and in vivo tests. The embolization gel is composed of **cross - linked** hylan (hyaluronan, hyaluronate), tantalum, microcrystalline cellulose, hexamethonium chloride, and thrombin. Upon delivery through small-lumen **catheters** to the appropriate vascular site, the gel induces formation of a solid blood/gel coagulum. Results from animal studies (rat aorta, rabbit auricular artery) demonstrate that formation of complete and long-lasting arterial blockage is readily achievable without complications due to blood flow, partial vessel obstruction, uncontrolled polymerization, or movement of the gel or its components (specifically thrombin and hexamethonium chloride) into the circulation. Microscopic evaluation indicates that arterial occlusion initially occurs as a result of the injected gel and formed fibrin; at 7 weeks and beyond, arteries are occluded by injected gel, inflammatory cells and fibrosis (scar tissue).

6/5/2 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

03823343 EMBASE No: 1988272783  
**Permanent inflation of detachable balloons with a low-viscosity, hydrophilic polymerizing system**  
Goto K.; Halbach V.V.; Hardin C.W.; Higashida R.T.; Hieshima G.B.  
Radiology ( RADIOLOGY ) (United States) 1988, 169/3 (787-790)  
CODEN: RADLA ISSN: 0033-8419  
DOCUMENT TYPE: Journal  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A polymer system was developed for use in permanent inflation of detachable balloons, to avoid long-term reliance on the integrity of balloon shells or valve mechanisms. This system is based on 2-hydroxy-ethyl methacrylate (HEMA) as the monomer, in combination with a **cross - linking** agent and a water-soluble curing system. The low-viscosity, hydrophilic mixture can be exchanged through a small-bore **catheter** into a detachable balloon and polymerizes in 40-60 minutes at body temperature. Partially polymerized HEMA can cause vascular occlusion; hence, careful timing of balloon detachment is required. The evolution of the radiographic appearance of HEMA-filled balloons is predictable. The balloons remain radiopaque on plain radiographs as long as the balloon shell and valve mechanisms are competent. After rupture of the shell or failure of the valve mechanism, the balloons become invisible on plain radiographs but remain hyperattenuating on computed tomography scans.

Set	Items	Description
S1	230526	ANEURYSM?
S2	319065	CROSSLINK? OR CROSS() (LINK OR LINKS OR LINKED OR LINKING? -- ?)
S3	376649	CATHETER? ? OR CATHETHER? ?
S4	14	S1 AND S2 AND S3
S5	6	RD (unique items)
S6	2	S5 NOT PY>1996
? show files		
File	2:INSPEC 1969-2003/Feb W2	(c) 2003 Institution of Electrical Engineers
File	5:Biosis Previews(R) 1969-2003/Feb W3	(c) 2003 BIOSIS
File	6:NTIS 1964-2003/Feb W3	(c) 2003 NTIS, Intl Cpyrght All Rights Res
File	8:Ei Compendex(R) 1970-2003/Feb W2	(c) 2003 Elsevier Eng. Info. Inc.
File	34:SciSearch(R) Cited Ref Sci 1990-2003/Feb W2	(c) 2003 Inst for Sci Info
File	35:Dissertation Abs Online 1861-2003/Jan	(c) 2003 ProQuest Info&Learning
File	65:Inside Conferences 1993-2003/Feb W3	(c) 2003 BLDSC all rts. reserv.
File	73:EMBASE 1974-2003/Feb W2	(c) 2003 Elsevier Science B.V.
File	94:JICST-EPlus 1985-2003/Feb W3	(c)2003 Japan Science and Tech Corp(JST)
File	144:Pascal 1973-2003/Feb W2	(c) 2003 INIST/CNRS
File	155:MEDLINE(R) 1966-2003/Feb W2	(c) format only 2003 The Dialog Corp.
File	172:EMBASE Alert 2003/Feb W3	(c) 2003 Elsevier Science B.V.
File	198:Health Devices Alerts(R) 1977-2003/Feb W3	(c) 2003 ECRI-nonprft agncy
File	434:SciSearch(R) Cited Ref Sci 1974-1989/Dec	(c) 1998 Inst for Sci Info
File	48:SPORTDiscus 1962-2003/Feb	(c) 2003 Sport Information Resource Centre
File	71:ELSEVIER BIOBASE 1994-2003/Feb W3	(c) 2003 Elsevier Science B.V.
File	91:MANTIS(TM) 1880-2002/Oct	2002 (c) Action Potential
File	162:CAB Health 1983-2003/Jan	(c) 2003 CAB International
File	164:Allied & Complementary Medicine 1984-2003/Jan	(c) 2003 BLHCIS
File	467:ExtraMED(tm) 2000/Dec	(c) 2001 Informania Ltd.

6/3,K/1 (Item 1 from file: 442)  
DIALOG(R)File 442:AMA Journals  
(c)2003 Amer Med Assn -FARS/DARS apply. All rts. reserv.

00038447  
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**Elastolytic and Collagenolytic Studies of Arteries; Implications for the Mechanical Properties of Aneurysms** (PAPERS READ BEFORE THE SEVENTH ANNUAL SURGICAL SYMPOSIUM OF THE ASSOCIATION OF VETERANS ADMINISTRATION SURGEONS, AIRLIE, VA, MAY 25-28, 1983)

DOBRIN, PHILIP B.; BAKER, WILLIAM H.; GLEY, WILLIAM C.  
Archives of Surgery  
April, 1984; 119: 405-4091984;  
LINE COUNT: 00310 WORD COUNT: 04281

... vessels were trimmed of loose connective tissue and were cannulated at both ends with polyethylene **catheters**. They were immersed in a tissue bath at 37 degrees C and were reextended to...

...with collagenase, the vessels took up markedly less Masson stain.

COMMENT

...Recently, there has been considerable interest in the use of lathyrogens (drugs that inhibit the **crosslinking** of collagen) in the treatment of arthritis, keloids, urethral strictures, and other problems of excessive scarring. Do you think that use of these drugs will lead to **aneurysms**, as it did in turkeys that ate sweet peas, the event that led to the...

6/3,K/2 (Item 2 from file: 442)  
DIALOG(R)File 442:AMA Journals  
(c)2003 Amer Med Assn -FARS/DARS apply. All rts. reserv.

00037176  
Copyright (C) 1982 American Medical Association

**Aortic Dissecting Aneurysms ; Causative Factors in 204 Subjects** (ORIGINAL ARTICLES)

WILSON, STEPHEN K.  
Archives of Pathology and Laboratory Medicine  
April, 1982 ; 106: 175-1801982;  
LINE COUNT: 00324 WORD COUNT: 04474

COMMENT

...of elastic fibers. (Ref. 8) The underlying abnormality is presumably one of collagen synthesis and **cross - linking**, which produces the characteristic histologic changes. (Ref. 4) Our findings differed in this respect: although...atherosclerosis and iatrogenic dissection. (Ref. 15,16) In these cases, dissection may be initiated by **catheter**-related injury to intima, and this intima may previously have been weakened by atherosclerosis. Presumably...

6/3,K/3 (Item 1 from file: 444)  
DIALOG(R)File 444:New England Journal of Med.  
(c) 2003 Mass. Med. Soc.. All rts. reserv.

00106516  
Copyright 1989 by the Massachusetts Medical Society

(sup 111)In-Labeled Nonspecific Immunoglobulin Scanning In The Detection Of  
Focal Infection (Original Articles)

Rubin, Robert H.; Fischman, Alan J.; Callahan, Ronald J.; Khaw, Ban-An  
; Keech, Francis; Ahmad, Marsood; Wilkinson, Robert; Strauss, H.  
William.  
The New England Journal of Medicine  
Oct 5, 1989; 321 (14),pp 935-940  
LINE COUNT: 00459 WORD COUNT: 06344

TEXT

...abdominal surgery, trauma, or both one to three weeks previously,  
vascular grafts or atherosclerotic aortic **aneurysms**, orthopedic  
prostheses, or localized pain lasting more than three days; or two or more  
blood...infection of aortic, aortofemoral, or femoral-popliteal prosthetic  
grafts or of a Hickman central venous **catheter** on the basis of severe  
bacteremia or fungemia, inflammation of adjacent tissues, or unexplained  
fever. In addition, four patients with fever in the presence of known  
atherosclerotic aortic **aneurysms** (two abdominal and two thoracic)  
underwent imaging. In 11 patients, an abnormal scan indicating focal...

6/3,K/4 (Item 1 from file: 149)  
DIALOG(R)File 149:TGG Health&Wellness DB(SM)  
(c) 2003 The Gale Group. All rts. reserv.

01412617 SUPPLIER NUMBER: 13432684 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Interventional neuroradiology.**  
Barnwell, Stanley L.  
The Western Journal of Medicine, v158, n2, p162(9)  
Feb,1993  
PUBLICATION FORMAT: Magazine/Journal ISSN: 0093-0415 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional  
WORD COUNT: 8929 LINE COUNT: 00778

TEXT:

... under live fluoroscopy without imaging the bones. This technique  
allows the course of a moving **catheter** to be followed through a blood  
vessel. The neurosurgeon may direct a **catheter** into a selected pedicle  
supplying an arteriovenous malformation or a balloon into an **aneurysm**,  
for example, without the image being obstructed by overlying bone.  
Embolic Agents  
A wide variety...

Set	Items	Description
S1	7320	ANEURYSM?
S2	10708	CROSSLINK? OR CROSS() (LINK OR LINKS OR LINKED OR LINKING? - ?)
S3	22159	CATHETER? ? OR CATHETHER? ?
S4	9	S1 AND S2 AND S3
S5	8	RD (unique items)
S6	4	S4 NOT PY>1996

? show files

File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Feb W3  
(c) 2003 ESPICOM Bus.Intell.

File 442:AMA Journals 1982-2003/May B1  
(c) 2003 Amer Med Assn -FARS/DARS apply

File 444:New England Journal of Med. 1985-2003/Feb W3  
(c) 2003 Mass. Med. Soc.

File 95:TEME-Technology & Management 1989-2003/Feb W1  
(c) 2003 FIZ TECHNIK

File 98:General Sci Abs/Full-Text 1984-2003/Jan  
(c) 2003 The HW Wilson Co.

File 135:NewsRx Weekly Reports 1995-2003/Feb W2  
(c) 2003 NewsRx

File 149:TGG Health&Wellness DB(SM) 1976-2003/Feb W1  
(c) 2003 The Gale Group

File 369:New Scientist 1994-2003/Feb W2  
(c) 2003 Reed Business Information Ltd.

File 370:Science 1996-1999/Jul W3  
(c) 1999 AAAS



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